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THE GREAT LAKES SERIES

Lake Huron and the Country of the Algonquins

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THE GREAT LAKES SERIES

Lake Huron and the Country of the Algonquins

By

EDWARD PAYSON MORTON, PH.D.

CHICAGO
AINSWORTH & COMPANY

The Great Lakes Series comprises, in the narrative of a continuous journey:

The Mohawk Valley and Lake Ontario.
Lake Erie and the Story of Commodore Perry.
Lake Huron and the Country of the Algonquins.
Lake Michigan and the French Explorers.

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The publishers desire to express their appreciation for the use of illustrations, to the Detroit Board of Commerce, the White Star Line, the Anchor Line, the Northern Michigan Transportation Company, the D. & C. Line, the Michigan Central, and the Grand Trunk.

Proofs of the chapters relating to Michigan have been submitted to Dr. George N. Fuller, sometime Townsend Scholar in history in Harvard University and Assistant in history in the University of Michigan.

L. H. C. A.

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INTRODUCTION

The author and the publishers of the Great Lakes Series feel that it is proper for them to set forth briefly the principles which have guided them in preparing these supplementary readers.

Though we realize that our work needs to be interesting, we do not wish it to be merely entertaining. These readers are school books and are not intended as a recreation for idle hours. Therefore we have been careful not to give too much space to stories of battles and skirmishes or to picturesque Indian legends. Because the reading lesson is too often but slightly related to the rest of the curriculum, we have tried to supplement the work in other studies by laying stress upon the more obvious relations between geography, history and commerce. Exploration and trade in America have both romantic and practical aspects, and one or the other of these is sure to appeal to wideawake children. The scenes visited in these books offer abundant material of both kinds—the chief difficulty has been to select.

In deciding upon the story form, as a convenient thread upon which to string what we wish to tell, we have tried to steer clear of two temptations. We do not intend that these stories shall be guide-books; therefore we have been sparing of mere dates and figures. Also, we do not wish to make James and Carrie a pair of precocious little prigs, escorted by a pedant. Therefore we

have tried to make the characters talk like normal human beings, in language that is simple and colloquial and at the same time free from slang and sins of grammar—such English, in short, as may reasonably be aspired to by those who wish to express themselves simply and clearly, without affectation either of bookish precision or of slovenly carelessness.

Some knowledge of history has been assumed: for example, that the Revolutionary War was the struggle of the American colonies for independence from Great Britain. Nothing has been merely alluded to which would demand lengthy or involved explanation; but it has been thought worth while to touch upon a few matters which are not fully explained, in order to stimulate that legitimate curiosity which is a chief source of growth in knowledge.

In accordance with this notion, the Questions, it will be observed, are hardly at all a catechism on the bare text. They are intended to send the pupils to their geographies, to the school dictionary, and to the common sources of information with which they should be beginning to grow familiar. Questions which can be answered by yes or no have been avoided; they are all designed to require a reasonable amount of attention and thought about the matter in hand. The habit of observing accurately and thinking clearly can hardly be begun too soon.

"Well," said Major Woods, as he joined his wife and their nephew and niece in the dining-room of the hotel at Detroit, "I have solved the problem of what we ought to do this afternoon."

"Uncle Jack!" said Carrie, as the Major stopped talking and devoted himself to his soup, "don't you see we are all just waiting to hear what you found out?"

"Oh, you are? I should think you'd get enough of sightseeing. Here you've kept your Aunt Lucy and me on the jump for over two weeks, and you show no sign of being ready to stop."

"But, Uncle Jack, we *like* sightseeing, don't you understand?"

"I should think you did! If I get through this alive, I'll never again offer to escort two youngsters who don't know when to stop. You're absolutely in-de-fat-i-ga-ble, that's what you are! But—" and his tone changed from banter to enthusiasm, "my good friend Captain Erskine, who really suggested to me that I ought to bring you back to Chicago by this roundabout way, is coming for us with his touring car, and he promises not only to show us Detroit, but to answer all your questions. We're to be ready at two o'clock."

"Won't that be nice!" said Carrie. "Uncle, I don't believe I ever had so much fun before, and really I'm learning almost as much as I do in school."

"Uncle Jack," asked James, "what does 'Detroit' mean? Is it an Indian word?"

"Oh, no, it is French," answered Major Woods. "The river was called *'le detroit,'* that is, 'the strait,' long before the French made a settlement here. You see, when people call Detroit 'the City of the Straits,' they are only translating its name into English."

While Carrie and her Aunt Lucy go to their rooms to get their wraps, let us remind our readers that James and Carrie Woods, aged respectively fifteen and twelve, had gone from Chicago to visit their uncle and aunt in Montreal. Major Woods, seeing their interest in United States history, had undertaken to bring them back to Chicago by way of the Mohawk Valley and the Great Lakes. The first week they spent between Lake George and Buffalo, and the second week on and around Lake Erie. Now, at the beginning of the third week they are starting to see Lake Huron, and expect to spend a fourth week on Lake Michigan.

THE COMING OF THE FRENCH

Just at two o'clock, Captain Erskine drove up, and as soon as the introductions were over, helped his guests into the car, and started off.

"Detroit used to be thoroughly French," said Captain Erskine, as the car started out Woodward Avenue, "but in the last fifty years its growth has led to the disappear-

ance of most of its old landmarks, until now, aside from some of its old families, the chief tokens of its origin are in the names of streets and places."

"Detroit is like St. Louis in that," observed Major Woods.

"When did the French come here, Captain Erskine?" asked James. "Weren't La Salle and Hennepin the first white men to see this place?"

"Almost, but not quite. Dollier and Galinée, who had left La Salle, were along here in the spring of 1670, and La Salle, with Henry de Tonty—'Tonty of the Iron Hand,' they called him, because he had lost one hand and wore an iron one—and Father Hennepin, came up the river on the 'Griffon' on August 12th, 1679. There was an old Indian village here then, and the Indians were astonished to see what to them was so huge a vessel go up stream without oars or paddles. Most of them, too, had never heard a cannon, and its roar amazed them beyond measure.

"In 1686, Du Luth, for whom Duluth is named, was ordered to build a fort on the Detroit. He chose a site at or near where Fort Gratiot is now, at the entrance to the lake just north of Port Huron, and built Fort St. Joseph. But this fort was abandoned in 1688, and there was no French settlement here until Antoine de la Mothe, Sieur de Cadillac, who was Governor of Michilimackinac, persuaded the authorities at Quebec to let him bring settlers and a garrison to the straits. When he finally got permission, he had to come by way of the Ottawa River and Lake Nipissing to Georgian Bay—"

"Why, that's the way Champlain came to the lakes first, wasn't it?" exclaimed Carrie.

"Yes," answered Major Woods, "and when we get over into the Georgian Bay, we'll learn something about the missionaries who followed him."

"Well," continued Captain Erskine, "Cadillac reached here on the 24th of July, 1701, and built a stockade which he called Fort Ponchartrain, in honor of the governor of New France. Of course, that was almost a century after Champlain first saw Lake Huron, but even then, Detroit is fifty years older than Erie and Buffalo, and nearly a hundred years older than Cleveland and Toledo."

"I suppose," said Major Woods, "that the French had no idea that in this region there would grow up great states and busy cities. If they had had eyes for anything but the fur trade, they might have taken more pains to colonize the country. Aside from Montreal and Quebec, Detroit was almost the only place to which they brought settlers."

"That is quite true," answered Captain Erskine. "Cadillac, however, seems to have been more of a colonizer than an explorer. And he knew how to advertise, too! Not long ago I found a copy of a letter which he wrote to a friend in October, 1701. He sets forth the charms of the region in language that would do credit even to a twentieth century promoter. Among other things he writes that 'Its borders are so many vast prairies, and the freshness of the beautiful waters keeps its banks always green. The prairies are bordered by long and broad rows of fruit trees which have never felt the

careful hand of the vigilant gardener. Here, also, orchards, young and old, soften and bend their branches, under the weight and quantity of their fruit, toward the mother earth which has produced them. It is in this land, so fertile, that the ambitious vine, which has never wept under the knife of the vine-dresser, builds a thick roof with its large leaves and heavy clusters, weighing down the top of the tree which receives it, and often stifling it with its embrace.

"'Under these broad walks one sees assembled by hundreds the timid deer and fawn, also the squirrel bounding in his eagerness to collect the apples and plums with which the earth is covered. Here the cautious turkey calls and conducts her numerous brood to gather the grapes. . . . Golden pheasants, the quail, the partridge, woodcock, and numerous doves swarm in the woods. . . . The hand of the pitiless reaper has never mown the luxuriant grass upon which fatten woolly buffalos, of magnificent size and proportion.' Doesn't that sound like a land of plenty?"

"It does, indeed!" answered Major Woods, "but how it has changed! You don't see any of those things here now."

"No, but they were to be found for over a hundred years. The same book in which I found Cadillac's letter reports that wild pigeons were seen here in 1824, deer in 1834, and wild turkeys as late as 1850.

"With all that wonderful growth of fruits of all kinds, it is natural, perhaps, that Detroit should have today a firm which is said to sell more seeds than any other

in the world. For over a hundred years, however, the pride of Detroit centered in her wonderful pear trees, of enormous size, and so old that some people maintained that they were here when the French first came. The probabilities are, however, that French settlers brought seeds or young trees with them about the middle of the eighteenth century."

"Shall we see any of them?" asked Carrie.

"No, I am sorry to say they are all gone now. The best I can do is to show you a photograph of some of them, taken in 1883."

After they had all exclaimed over the picture, Captain Erskine continued:

"One strange thing, considering how fertile the banks of the river were, is that for a century or so it was thought that the country back of Detroit to the west and north was too swampy and sandy ever to be worth anything. People did not realize either the value of the forests or of the land after it had been cleared."

A MODERN INDUSTRY

By this time our party was well out Woodward Avenue, and as they passed a group of immense buildings,

"What is that?" asked James.

"That is one of our big automobile factories. You know Detroit had the first one, and has never lost the lead."

"How many has Detroit now?" asked Major Woods.

"I'm not sure, but I think there are over a hundred firms which do nothing but make autos or automobile

Old Pear Trees at Detroit. Photographed in 1883

parts. I know that they have over 60,000 employees, and that within twenty-five years the making of automobiles has become Detroit's chief industry."

"Uncle Jack," said James, "is always telling us why certain things are made at some special place. Captain Erskine, why is Detroit the center of the automobile business?"

"The very first reason was perhaps an accident. Henry Ford, the first American to develop a successful automobile, lived in Detroit. But I don't think it was chance that brought R. E. Olds from Lansing to build his automobile factory here. I imagine that what brought Olds was that Detroit, because it is between two great lakes and near the middle of a long stretch of waterways suitable for small craft, had developed a great business in marine gasoline engines. You know it was really the gas-engine that made the automobile possible, and it was a great advantage for an automobile manufacturer to be where he could get not only good gas-engines, but workmen who were expert in making and in running them.

"That was the chief reason, I think, though a few other things contributed. Detroit has for years been an important center of the carriage trade, and workmen who could make wheels and bodies for carriages could also make them for automobiles. Then, too, Detroit has important industries which make malleable iron, pressed steel, springs, and aluminum castings. Doubtless all these have grown because of the demand created by automobiles, but the existence of these industries first drew the automobile builders to Detroit.

"Another thing, of course, that had a great deal to do with the growth of the automobile industry is the wonderful advertising that has been done. No other business has ever been more thoroughly or skilfully advertised. In fact, the advertising has been almost as wonderful as the machine it tells about."

"Oh, what a pretty grove!" exclaimed Carrie, as they came into a park. "What place is this?"

"This is Palmer Park, named for Thomas Witherell Palmer, one of Michigan's most distinguished sons. Except for the paths which have been cut through it, that stretch of forest back there has been untouched, so that we have, close to a great city, a bit of woodland which gives a very fair idea of how this whole region looked when the French first came here.

"This cabin," continued Captain Erskine, "was Senator Palmer's early home, and its rooms are filled with an unusually fine collection of rag carpets, andirons, squirrel-rifles, and scores of other relics of colonial days. We'll have time to go in and take a peep at them, if you wish."

"Now," said Captain Erskine, when they were again in the car, "as we go back to the city we'll turn off on Hancock Avenue and see the big Central High School. It's not only our biggest school building, but is beloved by thousands of Detroiters who have graduated from it.

"You know," he continued, as they drove slowly by it, "we are very proud of our schools here."

"You may well be," said Mrs. Woods, "if this is a fair specimen. How big is this building, anyway?"

"I don't know its exact dimensions, but it has seventy-five teachers and about three thousand pupils. It's one of the largest high schools in the country."

As they turned again into Woodward Avenue, Captain Erskine told the chauffeur to take them east on Jefferson Avenue out to Gladwin Park.

Central High School

"Detroit," he began, "has been the scene of a great deal of fighting. When the French first came, some of the Indians did not look with much favor on the white man's building a stockade which his red brothers were not free to enter at any time, so in 1706 the Ottawas besieged the fort for a few days. Again in 1712 the Fox Indians besieged and partly burned the place. Then there was peace until 1746, when some northern Indians attacked the fort. This time it was defended by Pontiac, the very chief who within twenty years was to put it in its greatest danger. The next year there was a plot to massacre the garrison, but it was discovered in time

and forestalled. Late in November, 1760, after the French had given up Canada, the British took possession of Detroit."

PONTIAC AND GLADWIN

"This," said Captain Erskine, as they came to a pleasant park with a picturesque group of buildings, "is the old Waterworks Park, now called Gladwin Park, in honor of the man who played so great a part in defeating Pontiac's plans. The attempt of Pontiac to seize the fort and its garrison in 1763 was, as you doubtless know, the most dramatic event in all the history of Detroit."

"You remember, children," said Major Woods, "that we heard tales of Pontiac last week when we were down in Ohio."

"The staging of the scene could hardly have been better," continued Captain Erskine, "if it had been done to order. Major Gladwin and his garrison were English, and the Indians through many years had been taught to look upon the French as their friends. The French had taken easily to the life of the woods, and many of them had married squaws and lived among the Indians. The English, on the contrary, had been less inclined to meet the Indians on their own terms, but were overbearing and generally superior. Men like Sir William Johnson and Cooper's 'Hawkeye' were exceptions among the English. Consequently when Pontiac, the Ottawa chieftain, sought to stir up the Indians to drive out the Englishmen, he found ready listeners and at last brought about

his great conspiracy. His plan was to attack all of the frontier forts at about the same time."

"Yes," said Major Woods, "we have already learned how Pontiac succeeded at Erie and at old Fort Sandoski, and before the week is over we'll find out how he captured the old fort at Mackinaw City. But go on, please."

"Pontiac's plan for taking Detroit," Captain Erskine resumed, "was made with all an Indian's treacherous craft. His braves were to cut short the barrels of their guns so that they could hide them under their blankets. Then Pontiac was to demand of Major Gladwin a great council in the fort. He was to make a long speech in favor of peace, and was to offer Major Gladwin a belt of wampum as proof of the friendliness of the Indians. But—and here comes in the real Indian touch of treachery—as he held out the belt to Major Gladwin, he was to reverse it, and at that signal his warriors were to throw back their blankets, seize their weapons, and attack the garrison."

"My! that was a trick!" said James.

"Please go on," said Carrie. "I want to know how it came out."

"Fortunately, Major Gladwin had been warned. There are various accounts of how he was told. According to one, a Madame St. Aubin saw the Indians filing off the barrels of their guns, and reported the matter. According to another account, an Ottawa chief named Mohigan exposed the plot to Gladwin. Still another version is that William Tucker, a soldier of the garrison, who had been captured and adopted by the Indians in

his boyhood, was told by his Indian sister, and carried the story to Gladwin. According to a fourth story, Catharine, an Ojibway girl, who was fond of Gladwin, came to his quarters with a pair of moccasins she had made for him, and when he gave her a skin of which to make him another pair, did not want to take it, because she might not be able to bring him the moccasins. Finally he is said to have questioned her until he found out all she knew. It is said, too, that Pontiac found out that she had betrayed him, and with his own hands gave her a whipping.

"Now, whichever one of these accounts is true—and the story of Catharine is the only one that sounds like fiction—Gladwin was warned in time, and undertook to match trick with trick.

THE GREAT COUNCIL

"When Pontiac asked for a great council, Gladwin consented, and named the 6th of May, 1763. On that morning, therefore, the Indians came, and by noon sixty warriors had gathered at the council house, each with his gun hidden under his blanket. But Pontiac was surprised, alarmed, and indignant to find all the soldiers under arms, and the cannon mounted and loaded. Pontiac protested against this show of unfriendliness, but Major Gladwin explained that it was done in their honor. When Major Gladwin had taken his seat, surrounded by his officers, Pontiac stood forth and began a long speech, giving the various reasons why the Indians and the English should be friends. At last he stretched out his hand

to give the belt of wampum to Major Gladwin, and as he made a slight motion to turn the belt, Major Gladwin put his hand to his head—a signal which his men understood, for they instantly grounded arms with a great crash, and the roll of drums sounded through the fort. Pontiac hesitated a second, decided not to reverse the belt, and finished his speech rather abruptly. After Gladwin had taken the belt, he leaned forward, thrust aside Pontiac's blanket, thus revealing his hidden weapons, and sternly rebuked him for his attempted treachery.

"Pontiac and his warriors, angry but helpless, stalked out of the fort, and as soon as they were a safe distance away, murdered a woman who had staid in her cabin outside of the fort, and then turned to attack the garrison.

"From that time until the end of June the Indians kept the little garrison closely besieged. On June 30th, reinforcements with supplies managed to break through the lines of Indians, but Pontiac did not relax his efforts. On July 10th the Indians tried to burn two English vessels in the river by sending fire-rafts floating down upon them, but the English were on guard and got their boats out of the way. The last of July, twenty-two barges made their way up the river with more men and supplies, but even then the Indians kept up their siege through August and September, until finally on October 12th, they agreed to a truce which really meant victory for the garrison."

"Was that the Fort Wayne that we passed as we came up the river?" asked James.

"Oh, no. The fort which Pontiac besieged was on the site of the original Fort Ponchartrain, rebuilt and enlarged four or five times. Fort Wayne, which is over three miles down the river from Fort Detroit, wasn't built until 1851, nearly a hundred years later. In 1778

DETROIT IN 1796

the English abandoned Fort Detroit and built a new one on the hill, which they called Fort Lernoult. That was the fort which General Hull surrendered to the British in August, 1812. After holding it a little over a year, the British withdrew, and when the Americans marched in a day or so later, they renamed it Fort Shelby, in honor of the governor of Kentucky, whose troops had been such a help to General Harrison.

"If you'll count up, you'll see that Detroit has changed its flag five times. First the French held it, then the English, then the Americans, then the English again, and

finally the Americans. No other place in the country, I think, has had quite that experience."

By the time Captain Erskine had finished his story of Pontiac's siege, it was after five o'clock, so he took them back to the hotel and staid to dinner with them. When they were through, they went up to the balcony, where Captain Erskine showed them two old pictures of Detroit, one painted in 1796, the other in 1820. They were all looking at them with great interest when Carrie exclaimed:

"Why, that must be the 'Walk-in-the-Water.'"

"I believe it is," answered James, "I think I can make out the name."

"James," said Major Woods, "isn't there some way by which you can be sure about it?"

"If I had a magnifying glass, perhaps I could tell."

"No, not that way."

"Oh, I see," cried Carrie, "you can tell by the date. This picture was made in 1820, and the 'Walk-in-the-Water' was the only steamer on the upper lakes then. Isn't that right, Uncle?"

"Yes, you have it. Captain Erskine, isn't there a picture of the first railway train in this part of the world, to put alongside of this one of the first steamboat?"

"I think perhaps there is. Yes, here's one, and I remember seeing in the lobby of a hotel at Monroe an old timetable of this same road, which is now a part of the Lake Shore and Michigan Southern."

"What a funny locomotive!" said James. "It looks like a kitchen stove on wheels, teakettle and all."

"I think the coach is funnier," said Carrie. "It looks a little like a church and a little like a birdhouse."

"What does 'E. & K.' stand for, Captain Erskine?" asked James.

"Erie and Kalamazoo. The engine, you can see, is named the 'Adrian No. 1,' and it was made by the Bald-

First Locomotive and Passenger Car in the West

wins in Philadelphia, taken to the lake—I don't know whether over the mountains or by way of New York and Buffalo. At any rate, it was brought to Toledo by boat. The road—that was in 1837—was only 33 miles long, and ran from Toledo to Adrian, so the engine was named for the western terminus.

"By the way, this picture of the 'Walk-in-the-Water' reminds me that the first vessel on Lake Erie to fly the United States flag was the sloop 'Detroit,' which the government bought from the Northwest Fur Company."

"Now, I must go. I hope you'll have pleasant weather this week, for you are going to see some very interesting country. When you come this way again, you must be sure to let me know."

NOTES AND QUESTIONS

Henry de Tonty's father, Lorenzo, devised in 1653 the system of life insurance known as tontine.

For an account of the "Walk-in-the-Water" see "Lake Erie and the Story of Commodore Perry."

Tell in your own words the story of Pontiac's attempt to capture Detroit.

Some of the proper names in this chapter are pronounced as follows:

Hĕn′ nĕ pĭn	Ponchartrain (pŏn shăr trān′)
Galinee (găl ĭ nā′)	Dollier (dŏl yā′)
Antoine de la Mothe (ăn twŏn′ dĕ lă mŏt′)	
Michilimackinac (mĭsh ĭ lĭ măk′ ĭ naw)	
Champlain (shăm plān′)	Gratiot (grăsh′ ĭ ŏt)

Spell, pronounce, and explain:

indefatigable	enthusiasm	respectively
introductions	disappearance	landmarks
prairies	ambitious	luxuriant
magnificent	probabilities	automobile
contributed	malleable	aluminum
massacre	conspiracy	treacherous
besieged	abandoned	experience

"Well, children," said Major Woods, when he had finished opening the pile of letters beside his plate, "eat a good big breakfast, for we want to make the most of this fine weather. I have a letter here from Mr. M. L. Powell—"

WINDMILL POINT, AT ENTRANCE OF DETROIT RIVER

"Oh!" interrupted Carrie, "Margie's father?"

"Yes, and he writes that he'll have his steam yacht 'Tamarack' meet us at Harbor Beach, though he himself can't join us till we get to Alpena."

"Will Margie be with him?"

"No; Margie, he says, is in a summer camp up on the Maine coast, not far from Mt. Desert. That reminds me—did you know that Mt. Desert used to belong to Cadillac?"

"Why, I didn't know that!" said Mrs. Woods.

"Yes, Cadillac had a big grant of land at Mt. Desert, and went there after he left Detroit. Now, we'd better be moving along, for we don't want to miss the boat."

Inside of an hour they were all seated near the bow on the upper deck of the 'Tashmoo' and on their way up the river, past a wooded island with lagoons and canals crowded with canoes.

"That's Belle Isle Park," said Major Woods, in answer to Carrie's question. "The city fathers were shrewd enough to buy it nearly forty years ago, and as you can see they've made a beautiful park of it."

"What's that island over there, Uncle?" asked James, as the steamer passed the lighthouse at the head of Belle Isle.

"That's Péche Island. The French named it *Isle de la Pêche*, that is, 'Isle of Fishes,' because the fishing there was so good, but the English who came afterwards corrupted it into Peach Island. For a good many years it was Pontiac's summer home."

"Oh, what a pretty lighthouse!" said Carrie. "We haven't seen one just like that."

"That is Windmill Point," said her uncle, "so named because the first windmill in Detroit was built there to grind the corn and wheat of the settlers. The lighthouse marks the head of the Detroit River, so now we are on Lake St. Clair."

"Why is it called Lake St. Clair?" asked James.

"Because when La Salle and his companions came this way on the 'Griffon,' they crossed this lake on August 12th, which was Ste. Claire's Day. The French had a

great way of naming places for the saint on whose day they first saw them."

"Don't you remember, Jim," said Carrie, "how poor Father Jogues named Lake George the Lac du St. Sacrement?"

"Yes," answered James, "but I'm glad they kept so many Indian names. I think they're both prettier and more appropriate."

"You are right about that, James," said Major Woods. "The Indian names either recall the tribes who

THE EXCURSION STEAMER "TASHMOO"

lived in a region, or they have a meaning which makes them appropriate. For instance, Yosemite means 'the Valley of the Grizzly Bear,' and Lake Erie, as you remember, was named for a tribe. Niagara, too, meant 'Thunder of the Waters.'"

"Oh, Carrie," cried James, "there's something we haven't seen before—a lightship. Why didn't they build a lighthouse, Uncle?"

"Probably because the depth of the water or the character of the bottom makes the building of a lighthouse either impossible or too costly. Then, too, this light is meant, I suppose, not to warn vessels off a ledge of rock, but to mark the channel, and the channel probably shifts more or less, so that the light needs to be moved from time to time.

"Now we are coming to a place, right out in the lake, where the government has had to dredge a channel and mark its course."

"What a lot of boats, Uncle Jack!" said Carrie presently, as they started up the channel. "It looks like a procession. Why, they are almost as thick as automobiles on the Midway at home."

"Yes," answered the Major, "there are lots of them. You must remember that all the water traffic from Lake Superior, Lake Michigan, and Lake Huron has to pass through this narrow channel to get to Lake Erie, and most of the boats are in a hurry because they cannot run the year round, but must take their cargoes between the middle of April and the first of December. They don't even stop at Detroit for mail or orders, but the government keeps a fast launch to deliver mail and telegrams to them as they pass up or down the river."

"Oh, Jim!" said Carrie, "look at those houses all built right out over the water. Wouldn't it be fun to live there and row your boat right up to the door! What do they call this, Uncle Jack?"

"These are the St. Clair Flats. As you can see, there are scores and hundreds of summer cottages here, not

great castles such as you saw in the Thousand Islands, but places of moderate size, where people with modest incomes can afford to bring their families to spend their summer on the water. You can put this with what you have seen in other places. The Flats here do not attract because of wonderful scenery, like Niagara, or the mountains, or even Mackinac. It is merely a comfortable, safe place in which people can live out-of-doors and get away from the dust and dirt and heat of the big cities. It's another of the good signs of the times, I think, that people want more and more to get out into the open for at least a part of the year."

When they had left Algonac behind and were therefore well started up the St. Clair River, James and Carrie amused themselves by looking eagerly ahead to see who would be the first to pick out the 'ranges' by which the steamer kept to a safe course. They had had some practice at it the week before when they came up from Toledo to Detroit, and it was great fun to see how often they could tell beforehand when the steamer would turn and in what direction.

A MODERN SALT BLOCK

"Uncle Jack, what is that big factory there?" asked James, pointing to a group of buildings covering several acres near St. Clair.

"That is one of the big 'salt-blocks.' This whole region, from east of Detroit clear over beyond Saginaw and Bay City, is underlaid, a couple of thousand feet

down by a layer of solid salt two or three hundred feet thick, and most of the salt used in the middle west comes from this territory."

"Do they mine it the way they do coal?"

"There are one or two mines, but for the most part they get the salt out of the ground in a very ingenious way. They bore a well—you can see some of the derricks, can't you?—and then they put down a six-and-a-quarter inch pipe with another one inside of it only four and a half inches in diameter. They force fresh water down the outside pipe, and as it dissolves the salt, the brine is pumped up through the inner pipe. Then this brine, which is collected in great tanks, is driven under heavy pressure through a number of heaters until it is ever so much above the boiling point. This great heat precipitates the lime—"

"What does 'precipitate' mean, Uncle?" asked Carrie.

"It means that the lime separates from the salt and settles to the bottom of the tank. Don't you remember how, out at your grandmother's, the teakettle in which she boils the hard water from the well is all lined with a hard white crust? Well, in that case the heat has precipitated the lime in the water just as it does here in the brine.

"Then the brine, thus freed from its lime, is pumped into a filter, which strains out the other impurities. From the filter it goes into an evaporator where the salt forms in very fine crystals. This salt is taken for table use, and the rest of the brine is turned into another kind of evaporator, called a 'grainer,' where the salt forms

on the surface in thin flakes. This flaky salt is the kind that is used in making butter and cheese, because the thin, soft flakes dissolve more rapidly and completely than the hard crystals.

"Of course, when the salt is first taken out of the evaporators, it is very wet. One way of drying it is to spread it out in the open air in great heaps, which are stirred up every few hours. This method of drying, however, not only takes several days, but allows the salt to take up some impurities, because the open air is likely to be both dirty and dusty. So, in this plant, the salt is first put into tall strainers of very fine netting. These strainers are then revolved so rapidly that most of the water is driven out of the salt by centrifugal force. Then it is carried slowly through great drums against a current of air which has been cleaned and heated, so that when it comes out of the drums it is perfectly dry. Then the dry salt is shaken through a series of sifters which grade it according to the fineness of the grains. From the sifters the salt runs through spouts to the packing-rooms, where ingenious machines automatically weigh it and pack it in bags, boxes, and barrels all ready for the market."

"My! what a lot of processes!" said Carrie.

"Yes, there are a good many, but they are all simple. The salt is turned into brine so that it can be pumped out of the wells; then the brine is heated and evaporated, and the salt is sifted and dried. Some of the machinery is very ingenious, but all the stages of its manufacture are designed to make it pure and keep it clean."

TUNNELING UNDER A RIVER

At Port Huron they left the 'Tashmoo' and went to take a look at the St. Clair tunnel.

"Why do we come to see this, Uncle Jack?" asked James. "It doesn't look so very different from the tunnels under the river at Chicago."

"It isn't much different from them, James," answered the Major, "but it is worth looking at because its construction, though it turned out to be simple enough, was quite an exploit in its day. This tunnel was built in 1889 and 1890, and some of the devices they used in building it were new and untried. Some years before there had been an attempt made at Detroit, but the water and the sand together had been too much for them. Here they were fortunate, because borings showed them that under the sand of the river bottom was a thick bed of stiff blue clay. So the engineers dug a deep pit on each side of the river, and at the bottom of each pit built a great round shield, a steel tube a little more than twenty-one feet across. These shields were of one-inch plates, sharpened on their front edge. Behind each shield they set up twenty-four hydraulic rams—"

"What's a hydraulic ram?" asked Carrie.

"I don't know that I can explain in detail, but in effect it is a device for using water pressure to deliver blows like a hammer. With these rams they drove the shields forward into the clay a foot or two at a time. Then the workmen would dig away the clay, and before the shield was driven forward again, and while its sides kept the

clay from crumbling in on them, they would set up a section of a great iron tube. These sections were eighteen inches wide, and each ring was made of fourteen pieces, which weighed about a thousand pounds each, and had flanges on them so they could be bolted together. Then they would drive the shield forward, dig out the clay again, and put up another ring.

"Each shield was pushed forward about ten feet a day, though once, when they were lucky, the distance was nearly twenty-eight feet."

"How could they tell that the shields would come together, Uncle?"

"Oh, that was where the twenty-four rams were especially useful. A surveyor's level was mounted on a stone base at the bottom of each pit, and pointed in exactly the right direction. Then if they found the shield was going ever so little to one side or the other, they would use the rams on that side to drive it true again. When the shields did meet, after about a year's work, they came together exactly."

"How far down does it go?" asked James.

"The lowest point, over near the Canadian shore, is about a hundred feet below the tracks back here on the level. The tunnel was built a good many feet below the bottom of the river for a curious reason. They wanted to be sure to have enough weight of sand and clay on the top of the tube full of air to keep it from rising to the surface. You wouldn't think, would you, that a tube of iron that weighed about 25,000 tons would have any tendency to rise?

"Another interesting thing about the tunnel was that, because one end is in Canada and the other end in the United States, half the castings were made in one country, and half in the other, in order to avoid paying duty."

"What did they do before they had the tunnel, Uncle Jack?" asked Carrie.

"Oh, they had a car ferry—in a few days you'll see a big one, the 'Sainte Marie,' which runs between Mackinaw City and St. Ignace—but the current here is always swift, and in winter the ice sometimes comes down in great packs, and makes a crossing slow and dangerous. Now, you see, there is never any delay here because of weather."

IN THE LUMBER COUNTRY

After a lunch at Port Huron, they caught another steamer for Harbor Beach, and were soon well out on Lake Huron, with the Michigan shore to the left, and to right only the tossing waters as far as they could see. A pleasant but uneventful run brought them in sight of the lighthouse at Harbor Beach. Even before the steamer had passed through between the breakwaters into the harbor of refuge, the children made out the graceful outline of the 'Tamarack,' with its gleaming white hull, polished brass rail, and a gaily striped awning stretched over the after-deck.

"There she is, Jim!" cried Carrie. "She doesn't look quite as big as the 'Scud,' does she?"

"No, she isn't as high out of the water, but she looks as if she'd go just as fast."

The deckhands were still making the steamer fast to the dock when a chunky, red-faced young man in a blue suit jumped lightly aboard, made his way to the upper deck, and after looking around a minute came up, cap in hand, and asked:

THE LIGHT AT HARBOR BEACH

"Isn't this Major Woods?"

"Yes, I am he."

"I am Captain Adams of the 'Tamarack.' Mr. Powell directed me to find you here and bring you around to Bay City. I have a launch waiting to take you out to the 'Tamarack.'"

By this time, the gang-plank was down, and Captain Adams escorted our party off the boat and across the pier to the launch.

"Oh! isn't this fun!" exclaimed Carrie, as the launch came gently around to the gangway, and a white-suited sailor held out his hand to help her aboard the yacht. As soon as they had been shown their quarters, the children looked over the yacht from the United States flag at the stern to the gilded eagle under the bowsprit. Meanwhile the 'Tamarack' had left the harbor far behind and was running a little west of north. Not long before they were called in to dinner the yacht veered more to the west, and when the children came on deck again was passing to the left of a low island.

"What is that island, Captain Adams?" asked Carrie.

"That is Charity Island," he answered, "and that buoy that we are going to pass in a minute marks the Charity Island shoal. That next buoy," and he pointed to one a little to the right and a mile or two farther up the bay, "marks Gravelly Point shoal. From there we shall run straight to the light which marks the mouth of the Saginaw River."

"Why are we going to Saginaw, Uncle Jack?" asked James, as Major Woods came on deck, lighted a cigar, and sat down in front of the wheelhouse to enjoy the sunset.

"Why are we coming to Saginaw? Because, as it happens, I have business there, and because Saginaw and Bay City are as good illustrations as you can find of what we have been discovering about so many of the places we have visited in the last two weeks or so. Can you tell what I mean?"

"Are they big cities?"

"Well, outside of the four great big cities we have been in, only Schenectady and Erie are larger. Saginaw has over 50,000 and Bay City over 45,000."

"I know what you mean, then. You are going to explain why these two cities grew up right here."

"That's just what I want to do. But the story of Saginaw and Bay City is not a mere repetition of the story of Oswego, or Buffalo, or Cleveland, or Detroit. The conditions here were peculiar, though they illustrate the same general principle that we have discovered to be true of these other places—namely, that cities do not grow haphazard, but owe their location and their importance to their geography and to the opportunity or necessity for handling certain commodities. After a while we'll go down into the cabin, and see what the map will tell us.

"Captain Adams," continued Major Woods, "what are your orders?"

"Mr. Powell directed me to consult your wishes. He cannot leave Alpena until late tomorrow night. Would it suit you if we anchored off the mouth of the river for tonight? You can get a cool night's sleep out here in the bay. Then tomorrow morning after breakfast, I'll take you up to Saginaw in the launch, for with it we can make better time in the river than with the yacht. We can start back after lunch and still reach Alpena in time, though you may have to take dinner on board the 'Tamarack.' How does that suit you?"

"That will do beautifully, thank you," answered Major Woods, "for while I am keeping my appointment

in Saginaw, you can get an automobile and take Mrs. Woods and the children for a drive around Saginaw's pretty parks.

"Now, children, let's go down and have a look at that big map of Michigan that I saw on the wall in the cabin."

A GEOGRAPHY LESSON

"In the first place," said Major Woods, when they were all in the cabin of the 'Tamarack,' "notice where the line that marks the 43d parallel of latitude runs across the state. See if it goes near any places you know."

"It starts just above Port Huron," said James, "and ends just below Grand Haven."

"Very good. Now, the 43d degree of latitude marks roughly the division between the soft wood and the hard wood forests of Michigan. Do you know what woods are called hard?"

"Oak and maple are hard woods, aren't they?"

"Yes, and beech, and cherry, and elm. Now, in Michigan there is very little hard wood north of the 43d parallel, and very little soft wood south of it. The name of one of the southern counties gives you a clue to the nature of its forests."

"Which one?" asked Carrie. "Oh, I see—Oakland."

"Do you see any well-known city close to the 43d parallel?"

"Let me see," said James, as he ran his finger along the line, "Lapeer, Flint, Corunna, Owosso, St. Johns, Ionia—oh, yes, Grand Rapids."

"Grand Rapids, then, is right between the hard wood country and the soft wood country. You could almost guess from that what its chief industry is. You know what it is, don't you?"

"Do you mean furniture?"

"Yes, but we haven't time to discuss Grand Rapids now. It is in the western part of the state on the Lake Michigan watershed, so perhaps we'll talk about it again when we get around on to Lake Michigan next week. Now let's see what country the Saginaw River drains. In the first place, how long is the Saginaw itself?"

"Why it seems to run only from the Bay to Saginaw. I should think, from the scale, that it is about twenty or twenty-five miles long," answered James.

"Yes. Now, what rivers flow into it?"

"One good-sized one runs from the north. That's the — my! what a funny name! — Tit-ta-ba-was-see. That comes from away up north. And there are some other rivers that flow into it—the Chippewa and the Pine."

"Yes, the very name of the Pine ought to tell you as much as the name of Oakland County did. What other rivers do you find?"

"Well, here's the Shiawassee, which begins away over east and runs north to the Saginaw. And the Flint River flows into the Shiawassee. There are some smaller streams, too."

"Now, James, where would you naturally expect to find a city along those rivers?".

"Why, I should think it would be right at the mouth

of the Saginaw, on the bay, where Bay City is, instead of twenty miles up the river."

"See if the map doesn't help you to find an explanation. Does it give you any clue to the size of the Saginaw River as compared with the others?"

"Yes, sir. If the map is right, the Saginaw must be a good deal wider than the others."

"Assuming that it is both wider and deeper, what would you infer?"

"In that case," said James, after some thought, "I should think it would be better for vessels to go up the river as far as they could, because that would get them into the country, instead of merely to the edge of it."

"That is just what happened. But suppose we adjourn until tomorrow. The engines have stopped, and we must be about ready to drop anchor. Let's take a turn on deck, and then we'll be ready for a good night's sleep."

NOTES AND QUESTIONS

For an account of the building and voyage of the "Griffon," see "Lake Erie and the Story of Commodore Perry."

Tell in your own words: How salt is made ready for use; How the St. Clair tunnel was built.

Trace on a map the journey from Detroit to the mouth of the Saginaw River. What is the scale of your map? How many miles to the inch? How many miles did our party travel?

Some of the proper names in this chapter are pronounced as follows:

Tĭt tā bă wăs′ see	Shī ă wăs′ see
Chĭp′ pē wă	Yō sĕm′ ĭ tē
Schenectady (skĕn ĕk′ tă dy)	Jogues (zhōg)

In the morning everybody was up bright and early, and as soon as breakfast was over, the launch was brought around and, with Captain Adams at the wheel, started up the river past Bay City to Saginaw. From where the yacht was anchored in the bay to the pier at Saginaw, the distance was nearly twenty-five miles. But to the children the hour and a half spent on the way seemed very short. When they reached Saginaw, Major Woods went at once to keep his appointment, and Captain Adams, leaving a sailor in charge of the launch, took Mrs. Woods and the two children for a ride into the country and through the parks.

By noon they were all on board the 'Tamarack' again, and sat down to lunch as soon as the yacht was fairly under way. When they came on deck once more they were nearing Charity Island, and were soon headed straight for Thunder Bay and Alpena.

"Uncle Jack," said James, "we haven't learned yet why Saginaw and Bay City have grown so big."

"That's so," answered Major Woods. "I hadn't forgotten, but was only waiting for a convenient time. You remember, don't you, that Captain Erskine told us the other day that for a long time the country west of Detroit was thought to be worthless. The result was that for a hundred years after Cadillac founded Detroit, this whole region was left to the Indian and the hunter. The streams you were tracing on the map last night

served very well as highways for the canoes of the Indians and the trappers—as they had doubtless served for many generations before the palefaces came.

"The bad reputation of the district was unfortunately confirmed by a survey which was ordered by the government early in the nineteenth century. The surveyors, whether from malice or carelessness I do not know, reported that the whole southern peninsula was either swampy or sandy, and would never be fit for anything but hunting and fishing. Consequently, for many years immigrants for the most part went to the south across Indiana and into Illinois and Iowa. Nevertheless, in 1822, one of the Campaus—who had been early settlers at Detroit, and were among its most enterprising citizens—came to the head of the Saginaw River and laid out a town. The same year the government built a fort and established a garrison at Saginaw, and the American Fur Company, which John Jacob Astor founded and controlled, had a post there. After a year the government withdrew the troops, and the American Fur Company took possession of the fort.

"The time came, however, when people discovered that a great part of the southern peninsula, north of the 43d degree of latitude, was covered with forests of splendid white pine. Now, although the various streams which unite to form the Saginaw River are not navigable for any distance except for canoes, nevertheless these streams afforded sufficient water to float logs down to the bay, and therefore made easily accessible an immense tract of first-rate pine timber.

"Now, by the middle of last century, the country between the Great Lakes and the Ohio was pretty well settled, and afforded an enormous market for pine lumber. And here were almost inexhaustible forests of pine at the very edge of this market. The streams which would float the logs to the mills, from which transportation by water was so easy, meant both cheap production and cheap distribution. Wouldn't it have been really surprising if thriving towns had not grown up at Saginaw and Bay City?

"The lumber business on the Saginaw River began in earnest about 1870, and reached its height in 1881 or 1882. After that it declined until now it is hardly more than a tenth of what it was then—though it is still very important. Now, you might have expected that, as soon as the timberlands had been pretty well cut over and the supply of lumber began to lessen, the importance of Saginaw would decrease. And that would probably have been true if Saginaw had been or had remained dependent on lumber alone.

"Fortunately, however, the Saginaw country developed a number of other industries—chief among them, salt-making. Salt wells had been opened at Saginaw and Bay City in the sixties, even before lumbering had developed much. The whole region is underlaid with salt beds, some of them enormously thick, and some of them very near the surface. Then somebody discovered that the waste steam from the lumber mills could be used in evaporating the salt brine, and to this very day any manufacturer who has waste steam can very easily make

salt as a by-product. The sawmills, too, furnish great quantities of waste, which can be utilized in making barrels and boxes, so that salt can be put on the market very cheaply.

"As the supply of lumber began to decrease, the cost of production increased. Can you see why that would be so, James?"

"I suppose that at first they cut the trees close to the streams, and when they got farther away from them, it took more time and labor to get a log to the mill, and both the time and the labor cost money."

"Yes, and at first they cut the best trees from the most thickly wooded tracts, and later took smaller trees from the poorer tracts. Now, a state of affairs like that always leads to efforts to economize, both by cutting down the cost of production, and by utilizing more of what had been waste material. Band saws began to take the place of the circular saws. Now, a band saw doesn't cut as rapidly as a circular saw, and it is more easily broken. But the band saw doesn't make as much sawdust as the circular saw, for it makes a thinner cut, and will get a good many more boards out of a log.

"Then, because Saginaw Bay is so situated that it makes a very good distributing point, many users of lumber found it worth while to come to Saginaw and make their products direct from the logs. Manufacturers of woodenware, and of dozens of other articles made wholly or chiefly of wood, set up their factories along the Saginaw River, where they could use as much of the waste as possible.

MATCHES AND THEIR BY-PRODUCTS

"Some of these by-products are very interesting. The match companies, for example, must have for their match sticks perfectly clear wood, straight-grained and free from knots. To make only matches would require them to reject many whole logs, and large parts of others. As a result, the big match companies make great quantities of doors and window-frames, and such things, out of lumber which they cannot use for matches."

"Isn't it funny," said James, "that doors and window-frames and sash should be by-products of match-making! I'd expect it to be just the other way."

"Why do they have to have the best wood for matches, Uncle Jack?" asked Carrie.

"Because a good match must be straight-grained and whole, so that it won't split or break in two when you strike it."

"How do they make matches, Uncle?" asked James.

"Always by machinery, and nearly every company has its own special machines. The essential thing about a good match-making machine is that it shall do perfect work and do it as rapidly as possible. I have heard of one machine that turns out nearly a hundred and seventy-eight million matches a day, all boxed and labeled, and ready to ship. That is a good many," he added, as the children gasped in astonishment. "Even if you assume that these matches are packed two hundred in a box, there would be nearly nine hundred thousand boxes."

"Goodness!" said James, "I should think that about

two machines like that would supply everybody in the United States."

"Oh, no, not by any means. Somebody, who has gathered statistics, figures that we use in the United States seven hundred billion matches a year. How many ciphers would it take to write that out, James?"

"Seven hundred billion, did you say? Why, three for the hundreds, and three for the thousands, would be six. Three for the millions would be nine, and two for the billions would be eleven altogether. My! that makes a long row of them!"

"True, but even then, that means only about twenty a day for each of us."

"I haven't had my share, then," said Carrie, "for I haven't used a match since we left Montreal."

"Oh, well," answered Major Woods, "I suspect that I've used your share and more, for I've just wasted ten trying to light this cigar out here in the wind."

"But, Uncle," said James, "how many machines would it take to furnish all those matches?"

"I don't know how many hours that machine worked in a day, but I don't suppose it makes that many every day. But even if it did, it would keep fourteen machines busy nearly all the time. However, that machine is merely the one with the highest record."

"But you haven't told us how they make matches, Uncle," said Carrie.

"Well, sometimes the logs are sawed into blocks the length of a match, and the machine shaves off strips just the thickness of a match, and these strips are chopped

up into match sticks. Sometimes a log or block is steamed or boiled so as to make it cut easily without splitting or splintering. Then these softened blocks are put into a lathe and a shaving just the thickness of a match is peeled off the block. Then this shaving is split and sawed into match sticks. The whole problem, you see, is to cut the wood into splinters which shall be just the same length and thickness, and to do all this so accurately and rapidly that the finished matches will be perfect and at the same time so cheap that nobody can afford to do without them. Of course, after the match sticks are made, they have to be fed into machines which will put the heads on them, and some of the machines which do that are very ingenious indeed."

"Isn't the making of matches one of the 'dangerous occupations'?" asked Mrs. Woods.

"Yes, dangerous because the phosphorus, which in some form or other has been used in the tips of all but the 'safety matches,' is fairly certain in the long run to give the workmen who handle it constantly a disease known as 'phossy jaw.' The poison attacks the jawbone, causes great misery, and finally death."

"Why doesn't everybody use safety matches, Uncle?" asked Carrie.

"Because safety matches have to be struck on a specially prepared surface, and people as a rule prefer matches that 'can be struck anywhere.' However, within just a few years the chemists have devised tips which do not contain any phosphorus. One of the best of these tips was patented by the Diamond Match Company—the

largest manufacturer of matches in the United States—but the directors of the company made the process public, because they felt that it was contrary to public policy to control or limit the use of a process so essential to the health of the workers. There is now, therefore, no good reason for making matches by any process which is injurious to the workmen.

"Well, well, we have rather got away from what we were talkng about—the reason why Saginaw and Bay City have so steadily grown. As I was saying, when you started me off on' matches, the growing scarcity of lumber, and its increasing price, brought manufacturers to the Saginaw River, where by economy in manufacture and closer utilization of their raw material—the logs, they could keep down the cost of production. So that, because of the fact that Saginaw Bay affords easy transportation to the markets of the middle west, the very thing which would be expected to make its cities lose in importance and population—namely, the decrease in the quantity of lumber — actually has increased their importance.

BEET SUGAR

"Another thing has contributed, too. As the forests have been cleared off, settlers have discovered that the soil is by no means as barren as the early investigators had thought. As a matter of fact, fruits and vegetables and farm products do well there. Best of all, someone was inspired a few years ago to try growing sugar beets. The climate has proved suitable, and the abundant water

supply has led to the building of sugar factories. A factory uses about five thousand gallons of water in extracting the sugar from a ton of beets, so that a factory which slices five hundred tons of beets a day needs a daily supply of about two and a half million gallons. There is a factory at Saginaw which has a capacity of a thousand tons of beets a day, and that factory makes about fifty or sixty thousand barrels of sugar a year.

"The raising of sugar beets has a number of advantages beyond the mere fact that the farmer can get good returns per acre. For one thing, the rootlets of the beet are almost as remarkable as those of alfalfa in the way they penetrate four or five feet below the surface, even in hard, stiff soil. This loosens up the soil, and as the rootlets die they leave little air channels and also a certain amount of material that enriches the soil. Sugar beets do not exhaust the ground, as most crops do, but actually add to its power to raise other crops. A field that has been planted with sugar beets this year will raise a bigger crop of corn next year than a field right alongside of it which was planted with something else. That is one of the by-products, so to speak. Another one is that the tops may be used either as food for stock or as fertilizer.

"But that isn't all of the story by any means. At the factory, the beets are washed, sliced, ground to a pulp, and then put through various processes to extract the sugar. After the sugar has been taken out, there is left the pulp and a considerable quantity of molasses. The pulp is sometimes fed to stock, and sometimes used for

fertilizer. The molasses, because it has so many other things in it besides sugar and water, is not fit to use as syrup. But it has proved to be very valuable in a number of ways. Occasionally it is mixed with other foods and fed to stock. Sometimes they make denatured alcohol from it; sometimes they make vinegar from it. Two of its uses are very odd. They mix it with coaldust and press the mixture into briquettes. They have even tried the experiment of making paving blocks of it, but it will take a long test to see how well these molasses blocks stand the wear and tear of service."

"Well," said James, "I didn't suppose that they made any sugar up in this part of the world—except maple sugar."

"I'd like to see some of those paving-stones made of molasses," said Carrie. "It sounds just like a fairy story. I'd expect to find that the brownstone fronts of the houses were made of chocolate, and the barber poles of peppermint candy. Wouldn't it be fun, if it were really that way, Jim!"

"Wouldn't it!" echoed James. "But what's that?" he added, as a sudden popping and crackling began just over their heads. After a look he jumped up, saying:

"Oh, I know. It's Captain Adams at the wireless. I wonder what he's doing."

"Probably he's telling Mr. Powell we are coming," said Major Woods. Presently the crackling and popping ceased, and Captain Adams came forward.

"Major Woods," he said, "Mr. Powell sends word that he will meet us at the mouth of the river, and that

unless you especially want to go ashore, we will start at once for Nottawasaga Bay. If we do that we can easily make Collingwood by breakfast time tomorrow."

"That suits me perfectly," answered Major Woods. "Will Mrs. Powell be with him?"

"I think not, sir. When I left Alpena yesterday, Mrs. Powell was still in Chicago."

Before long, Captain Adams called the children to the pilot house and showed them through the glasses a bright red buoy, so far in front of them that they could barely make it out.

"We are going almost due north now," he said, "but when we get within about two miles south of that buoy, we'll turn a little west of northwest, and will have a straight course for ten miles right up to the lighthouse on the pier at Alpena."

"How long will it take us to get there, Captain Adams?" asked Carrie.

"We'll turn in about five minutes. So I think you'll be shaking hands with Mr. Powell in about forty-five minutes. Do you think you can wait that long?"

True to his prediction, Captain Adams brought the 'Tamarack' up to the pier at the mouth of Thunder Bay River in exactly forty-five minutes. As the sailors threw out the line, a tall, slender man with a bald head and a bushy beard stepped forth and waved his hat.

"Good afternoon, Mrs. Woods! How are you, Major?" he called. Then as the yacht came gently up to the pier, he jumped aboard and came forward.

"I'm glad to see you looking so well, and delighted to

have your company for a few days. I'm only sorry Mrs. Powell can't join us. How you have grown, Carrie! I'd hardly know you. How are you, James? It seems to me you've grown a little, too. He does look the image of his father, doesn't he?" he added, turning again to Major Woods.

"Yes, he grows more like him every day, we think."

"Now, Major, did you want to stop here at Alpena, or are you ready to go on to Collingwood?"

"We're perfectly ready to go on, only you'll have to agree to tell these youngsters something about Alpena, to make up for it. They are out for fun, but they don't seem to mind picking up a little information, when they can be sure it's reliable."

"All right. I'll see what I can do. Captain Adams, as soon as you get those boxes aboard, you may start. Now, do come and sit down and tell me all about yourselves."

ACROSS THE LAKE

Major and Mrs. Woods and Mr. Powell went back to the stern and sat under the awning, while James and Carrie staid with Captain Adams at the bow. When they came opposite the big red buoy, he showed them that it was throwing out a red light.

"What makes the light?" asked Carrie.

"Its body is full of compressed gas, which is released just as it is on a railroad car. Didn't you ever wonder how a Pullman got its light?"

"I don't think I ever did. Somehow a sleeping-car

seems just like a house. But of course they have to carry the gas with them some way."

Soon after passing the red buoy the 'Tamarack' began to cut across the path of vessels bound to or from the St. Clair River. As they sighted one vessel after another, Captain Adams would tell them that it was a cargo boat belonging to such and such a line.

"But how can you tell what line it belongs to?" asked Carrie.

"By looking at its smokestack. Don't you see that those two vessels close together over there have different kinds of bands on their stacks? If it were night, and there were need for it, each line would have its own set of colored lights to burn as a signal."

"Oh, there's a big passenger boat!" said James.

"Yes, that's the 'Pickerel' of the Fishing Line. Don't you see those three green bars on the stack?"

"Well!" said Carrie. "I see how you can tell what line she belongs to, by looking at the stack. But how do you know she's the 'Pickerel'? We're too far away to make out her name."

"For one thing, she's the only boat of that line with only one stack. For another, I happen to know that she is bound up the lake today."

Just then the steward called them to dinner, and by the time they were through they had crossed the track of other vessels and were plowing through the smooth water without a light visible in any direction.

"Oh, Jim!" cried Carrie, "we're out of sight of land again. Isn't it fun!"

"True, Carrie," said Major Woods, who had just come forward, "but as long as we can't see anything, suppose we go down and get Mr. Powell to tell us a little about Alpena."

"Alpena?" said Mr. Powell, a few minutes later. "Well, Alpena is not very old. Twenty-five years ago it was just a big lumber camp, noisy, and mussy, and picturesque. Then the sawmills came, and the town grew like a mushroom for a little while. By and by, however, the lumbermen worked back into the interior, and there were only the sawmills left. The town has grown a little, and it is young yet. We have a splendid harbor, and just as fast as the country back of Alpena gets more thickly settled, the town will grow, too. So far, Alpena hasn't developed any other industry as big as its lumber interests. Saginaw has, you know, but Saginaw is more than fifty years older than Alpena, and I don't expect Alpena always to be that far behind."

"Well, well, children," said Major Woods, when they had discussed the lumber business at some length, "I think we had better turn in. If we don't we shan't wake up in time for breakfast, and that would be too bad."

NOTES AND QUESTIONS

Trace on a map the streams which unite to form the Saginaw River.

How many counties are in the Saginaw valley? How many miles long is it, from north to south? How many miles wide is it? About how many square miles are in it?

Trace on a map the journey from Saginaw to Alpena; from Alpena to Collingwood. How many miles are there in each stage of the journey? How many altogether? What is the distance by water from Port Huron to Collingwood?

Where is Nŏt tă wă să′ gă Bay?

Spell, pronounce, and explain:

(These words are from Chapter Two)

interrupted	appropriate	traffic
government	comfortable	moderate
ranges	direction	ingenious
precipitates	impurities	evaporator
centrifugal	automatically	hydraulic
uneventful	breakwaters	bowsprit
buoy	illustrations	repetition
commodities	parallel	watershed

(These words are from Chapter Three)

convenient	reputation	confirmed
malice	immigrants	navigable
sufficient	accessible	inexhaustible
transportation	distribution	tract
dependent	utilized	economize
essential	million	billion
statistics	occupation	phosphorus
injurious	scarcity	picturesque

THE COUNTRY
OF THE
HURONS.
Scale of Miles
10
0
20
Quebec
Three Rivers
St. Richelieu
Montreal
L. Champlain
R. Ottawa
R. St. Lawrence
L. Nipissing
ALGONQUINS
L. Simcoe
LAKE ONTARIO
NEUTRAL NATION
Mohawks
R. Oneida
R. Onondaga
R. Oswego
R. Onnondage
R. Sinnekes
LAKE ERIE

Father Jean de Brébeuf

"Now, children," said Major Woods, as the yacht left Collingwood and turned north, "I brought you over here for two reasons. One of them is that the mere beauty of these thirty thousand islands is worth traveling far to see. The other is that along this stretch of country between Collingwood and Killarney the French missionaries made their earliest efforts to Christianize the Indians. You have already heard a little about the missionaries. You remember, don't you, about the one who was tortured to death by the Mohawks?"

"Father Jogues!" exclaimed Carrie, "of course we remember about him—poor man!"

"Well, we shall hear of him over here, too, along with a host of others. In fact, the story of the French missionaries is one of the most interesting and inspiring chapters in the history of North America. The explorers, Champlain, La Salle, Tonty, Joliet, and others,

have their part, too, but all in all it is hardly so glorious as that of the missionaries.—"

"How about Marquette, Uncle?" asked James.

"Marquette was both missionary and explorer, like some of his fellows. For instance, Father Joseph le Caron, who went with Champlain up the Ottawa in 1615, traveled in a different canoe, and because his Indians made better time than Champlain's, Caron reached Lake Huron a week or two before Champlain. Do you remember how it was that Champlain discovered Lake Huron before he did Lake Ontario?"

"Yes, sir," answered James, "it was because the Iroquois were at war with the Hurons, with whom Champlain was traveling, and so they took him up the Ottawa instead of the St. Lawrence."

"Exactly. Now, the Hurons, as it happened, were a relatively peaceful nation, and in many ways responded more readily to the efforts of the missionaries than almost any other Indians. The Iroquois, on the contrary, were a nation of fighters, and sent their bands of warriors on raids that covered almost all of the country east of the Mississippi. They even attacked the Illinois, and it is difficult to estimate the number of tribes that they either drove from their old homes or exterminated entirely, as they did the Eries.

"Once in a long while, however, the Iroquois were paid in their own coin. Assikinack, an Ottawa chief, who lived in the first half of the nineteenth century, told a legend handed down from father to son for many generations, of how the Iroquois used to come north to

the Blue Mountains, which are not far from the Nottawasaga River—do you know where that is?"

"Well," answered James, reflectively, "we're on Nottawasaga Bay, so the river ought to flow into it."

"Yes, it runs in west of Collingwood. Now, Sahgimah, who was chief of the Ottawas who lived on Grand Manitoulin Island and on the Saugeen peninsula—you remember we came around the end of that into Owen Sound—once found a band of a hundred or more Iroquois warriors camping on the high ground overlooking the bay not so very far from where we are now. Sahgimah spied upon their camp and found them feasting and dancing, as careless of danger as if they were in the midst of their 'Long House' instead of in the heart of the enemies' country. At length, tired of dancing, and sleepy after having stuffed themselves with moose-meat, the Iroquois all fell asleep without leaving even one sentinel. Then Sahgimah crept into their camp and carefully took away all their weapons—war-clubs, and tomahawks, and scalping-knives. At midnight the Ottawa warriors, who had surrounded the camp of the sleeping Iroquois, raised their terrible warwhoop and slaughtered all but a few of the party.

"I forgot to tell you that each of the Iroquois warriors had a 'property pole' on which hung a buckskin bag containing his pemmican and his private baggage—his knapsack, in short. The victorious Ottawas cut off the heads of the slain Iroquois and fixed each head on its owner's property pole, with the face toward the lake. Then Sahgimah loaded a canoe with provisions, and put-

ting into it the few captives he had spared, ordered them to go back to their Long House and tell their people that Sahgimah kept watch on the Blue Mountains, and would put on a pole the head of every Iroquois who dared intrude."

"Did the Iroquois come back?" asked James.

"Assikinack didn't say, but I suspect that they did, for the Iroquois never would own that they were beaten, and I have come upon no instance in which another tribe made any permanent stand against them.

"But suppose you look at a map—the one in that steamship folder will do—and let's see how the explorers and missionaries came to this part of the world. Follow the Ottawa River up to Lake Nipissing and then down French River to the Georgian Bay. What is the general direction?"

"Why," answered James, "it is almost due west."

"Champlain and Father le Caron reached the Bay in August, 1615, and then went south nearly a hundred miles to the Huron villages. Less than fifteen years later, that is, in 1628, Father Gabriel Sagard came up to the Georgian Bay and labored among the Indians. Six years after, in the summer of 1634, Fathers Brébeuf and Daniel made the same toilsome journey up the Ottawa—Father Brébeuf counted thirty-five portages—and established a mission among the Hurons on the shores of 'Lake Iroquois,' as the French then called the Georgian Bay.

"That same summer, Jean Nicolet, an interpreter, under orders from Champlain, pushed on west from the

mouth of French River. He went through the North Channel between Grand Manitoulin Island and the mainland to the Sault Sainte Marie, that is, the Falls or Rapids of St. Mary, where the waters of Lake Superior flow into Lake Huron. It seems likely that, close as he was to Lake Superior, he did not go above the rapids, but went down the river, followed the shore of Lake Huron south to Mackinac, and through the Straits into Lake Michigan. From the Straits he followed the west shore of Lake Michigan into Green Bay. We'll hear more of Nicolet when we get over into Green Bay next week.

"You see, therefore, that the hostility between the Iroquois and their neighbors on the north explains why the French got as far west as the Sault and Lake Michigan before they ever saw Lake Erie. Of course, too, they were following the Indian trade routes, and when we get farther north we'll find that the development of the Canadian Northwest is again calling attention to the shortness and directness of the trails which were followed in the early days by the fur traders, and then were almost forgotten."

THE CHRISTIAN ISLANDS

Just then the 'Tamarack' turned to the right between a headland and a group of islands.

"What islands are those?" asked Carrie, turning to Captain Adams, who had come forward while the Major was talking.

"Those are the Christian Islands," answered Captain

Adams, "though I don't know how they got their name."

"Oh, I remember," said Major Woods. "In 1649 the Iroquois attacked the Huron villages around in Waubashene Bay, not far from Midland. Father Paul Ragueneau had a flourishing mission at old Fort Sainte Marie on the Wye. Earlier in the year the Iroquois had sent war parties over into the Huron country east of here, and had destroyed a number of villages and killed the missionaries. In June the news was brought that the Iroquois, determined to make a clean sweep of their foes, were coming to Sainte Marie. Father Ragueneau, who was in charge, saw no way to save his converts but by flight. So, while some of the warriors prepared to fight off the Iroquois as long as possible, the rest, with the women and children, hastily gathered up the most valuable of their belongings, and loaded all the canoes they had. After many trials and much suffering the most of them reached these islands, twenty miles from Fort Sainte Marie, and were for a time at least safe from the pursuing Iroquois. Here they built another church, and in time the islands took their name from the Christian Indians who had taken refuge on them."

"Did the Iroquois hate these Indians because they were Christians?" asked Carrie.

"Not especially. Of course, they taunted them with their change of faith, but their chief ground for hatred was that the Hurons were the friends of the French who had helped them in their wars against the Iroquois."

"Where did the Hurons live, Uncle?" asked Carrie. "All around Lake Huron?"

"No, only between the Georgian Bay and Lake Erie. The Iroquois finally ruined them as a nation, and drove their remnants westward. West and north of the Hurons lived the Algonquins. The Ottawas and the Chippewas (or Ojibways, for the tribe had both names) were tribes of the Algonquins. The Ottawas lived along the upper part of the Ottawa River, on the Saugeen Peninsula, and along both sides of the North Channel. The Chippewas lived around the Sault Sainte Marie, and down around Mackinac, where their descendants still live."

While the Major was talking the 'Tamarack' rounded the headland and turned into Waubashene or Sturgeon Bay.

"Mr. Powell," said Major Woods, "can't you stop for an hour at Penetang?"

"Certainly. I was going on to Midland, but Penetang will do just as well." And he went forward to give the pilot the necessary orders.

"Penetang?" said Carrie. "That's a queer name."

"It is Indian," answered her uncle. "The full form is Penetanguishene, which means 'shining sands.' I think you'll find it appropriate."

"What are we going to see here, Uncle Jack?" asked James.

"Nothing very important. The British had a post here during the War of 1812, and we can still see the quarters that some of the officers lived in then. In spite of the fact that the white men came into this region nearly three hundred years ago, there is very little of

their handiwork that is now visible. Even the precise locations of the old French missions, Ossossane, St. Ignace, St. Louis, and the rest, have not been absolutely fixed in all cases."

"Why is that, Uncle?" asked Carrie.

"Partly because the Iroquois made such a clean

OFFICERS' QUARTERS, 1812, NEAR PENETANG

sweep, and partly because the missionaries followed the Indian custom and built of wood. Over on the Christian Islands part of the buildings were of stone, so that there is no trouble in finding their exact site.

"It's rather interesting that the oldest reminder of the presence of the palefaces in this part of the world is not a building, but a metal instrument hardly as bulky

as an alarmclock—an astrolabe, which Champlain lost on his way up the Ottawa River, and which some one picked up not very many years ago."

"What's an astrolabe?" asked James. "I never heard that word before."

"It is an instrument which people used in those days to take observations of the stars, in order to determine the latitude of a place. Not very long after Champlain's time, the astrolabe was replaced by quadrants and sextants, which are both simpler and more accurate in their results.

"Well, here we are. We'll be back inside of an hour, Captain Adams. All we want is to get a little exercise and see the village."

Within an hour or two after leaving Penetang, the 'Tamarack' was in a narrow channel surrounded by islands of all shapes and sizes. After a while Carrie asked:

"Thirty thousand islands, Uncle Jack? Are there really that many?"

"Yes, more than that many. Of course, many of them, as you see, are very small, but real islands nevertheless. One of the British government's surveyors reported many years ago that he had actually counted 47,500. In some places along the east coast here, the islands extend ten miles from the shore, and the channels between them are so intricate and confusing that it is almost impossible to know positively when you have reached the mainland. As you can see, even from here, some of the channels are very narrow and winding.

THE APOSTLE OF THE HURONS

"But before we get too far from the Huron country, I must tell you a little more about the French missionaries. You can look at the scenery and listen at the same time, I think. By the way, have you any idea how far east we are? Did you realize that we are almost due north of Buffalo?"

"Almost due north of Buffalo!" said James. "Why, I hadn't any idea we had come so far east!"

"Well, if you'll look on the map, you'll see that I'm right. Now, let's get back to the missionaries. France sent out a great many, but of them all Father Jean de Brébeuf, the 'Apostle of the Hurons,' was one of the most striking figures. He came of a wealthy Norman family of Bayeux. Did you ever hear of Bayeux?"

"I don't remember," said Carrie.

"Oh, yes," said James, "isn't Bayeux the place where Matilda, the Queen of William the Conqueror, embroidered the story of the Norman Conquest of England on a tapestry? We had that in our history last year."

"Yes, that's right. Well, Father Brébeuf was a splendid big man physically, very tall, and broad and strong in proportion. He was so big that when, in 1626, he wanted to go from Quebec to the country of the Hurons, the Indians at first refused to take him into their canoes for fear he would swamp them. But he finally persuaded them, and made the journey safely.

"On this first trip he staid long enough to learn the language, and was then recalled to France. While he

was at Rouen he met Father Jogues, and his stories of the opportunities for service—and very likely for martyrdom—in the wilderness led Father Jogues to ask to be sent out too. In 1634, Father Brébeuf was back again among his Hurons who received him joyfully and built a bark house for him, which was divided into a chapel, a living-room, and a storehouse. Among other things, Father Brébeuf had a striking clock which fascinated the Indians. They called it 'the captain,' and would ask what it said."

"What did it say, Uncle?" asked Carrie.

"When it struck twelve, it said 'Hang on the kettle'; when it struck four, it said 'Get up and go home.' Father Brébeuf also had a prism, a magnet, and a magnifying glass, and the Indians never grew tired of marveling at them and experimenting with them.

"After a time, however, the Indians suffered from a terrible scourge of smallpox. Naturally, their medicine men blamed the missionaries for this new terror, and many of the Indians wished to kill the palefaces. It happened that it was a custom among the Hurons for those who were about to suffer death to give a farewell feast. So the missionaries invited the Indians in and gave them a feast with all the ceremony and lavishness that they could manage in the wilderness, but their calmness and fearlessness so surprised and pleased the Hurons that thereafter the missionaries were perfectly safe among them.

"For a number of years the mission to the Hurons thrived wonderfully, until there were a dozen or more

stations, each with its chapel and attendant father or fathers. But in 1648 the hostile Iroquois made a sudden raid on one of the missions, destroyed it, and killed Father Daniel, who was in charge. The next year, in March, the Iroquois came again, and attacked the village of St. Ignace—over toward Lake Simcoe from here. Only three of its four hundred inhabitants escaped to St. Louis, another mission three miles away. Father Brébeuf and Father Gabriel Lallemant, a young man, were stationed at St. Louis, and though urged to flee, would not leave their post. About eighty warriors out of the seven hundred Hurons at the mission decided to stay and try to protect the missionaries, but the others fled. The Iroquois were easily victorious, and took captive the two missionaries and a few of the Hurons. Then they proceeded to torture Father Brébeuf and Father Lallemant. The details of their sufferings are too terrible to give. After four hours Father Brébeuf was freed from his agonies by death, but Father Lallemant endured for seventeen hours, although he was a frail man, who would not have been expected to bear so much as the gigantic Father Brébeuf."

"What a terrible fate!" said Mrs. Woods. "If the other Frenchmen had been like the missionaries, things might have turned out differently."

"True, but one trouble with the French *voyageurs* and *coureurs des bois*—who were more numerous than the settlers, and who had the most intimate relations with the Indians—was that they adapted themselves to the ways of the Indians, not in order to help the Indians, as

the missionaries did, but for their own selfish gain. They wanted furs, and because liquor would buy more furs than anything else, they rarely hesitated to give it to the Indians. In the end, as more than one historian has pointed out, these men, so picturesque in many ways, and admirable for their courage, hardiness, and cheerfulness, instead of elevating the Indians to a little higher stage of civilization, fell back themselves to the Indians' level and became decivilized."

"What's the difference between *voyageurs* and *coureurs des bois,* Uncle Jack?" asked Carrie.

"The *coureurs des bois*—literally 'runners of the woods'—were the trappers and hunters. The *voyageurs* were the men whose chief business it was to take the canoes and supplies of the traders back and forth between the St. Lawrence and the frontier posts. Often, of course, their occupations overlapped, and a boatman would turn to trapping, or a trapper to boating. They did the hard work of the wilderness, and their descendants are still doing it, trapping for the fur companies, or working in the logging camps.

"Well, well, some of this scenery is beginning to look familiar. Lucy, you haven't forgotten the fun you and my brother Charles and I had up in here a dozen years ago, have you?"

"Indeed, I haven't! I remember that you acted like two boys, and rode on a creaky old merrygoround at French River as long as you had any change left."

"Mr. Powell, said Major Woods, "is Captain Adams going to stop at Byng Inlet?"

"Yes, and we'll be there inside of half an hour."

"I suppose we'll have time to take a stroll up the main street?"

"Yes, you'll have time for that, but be careful not to get too far away from the center of things."

"Why, see!" said James, "the pier is a big granite rock that goes straight down into the water!"

"Oh, Jim!" said Carrie, "did you ever see anything just like it? We're walking on a sawdust street between solid rock walls, with the houses on top of the walls! Just look at the ladders the people have to climb to get up to their front doors. Isn't it interesting! Who live in these houses, Uncle?"

"Just the workmen in the big sawmill here. You see they had to do something with the sawdust, and so they just began to fill up this little canyon here."

"But what did Mr. Powell mean about not getting too far away from the main street?" asked Carrie. "I don't see any side streets."

"That's just what he meant, my dear. There aren't any. You have seen the whole village."

A FOREST PLAGUE

When they came back to the 'Tamarack' they found Mrs. Woods and Mr. Powell seated on the forward deck, fighting mosquitoes.

"My! but these mosquitoes are pests!" said Mrs. Woods, as she waved a cluster of lighted joss-sticks. "Where do they all come from?"

"Well," answered the Major, "the mosquitoes seem

to have been the original inhabitants. At any rate, Father Gabriel Sagard, who came here in 1628, found them vigorous and active. He devoted a whole page to them in his 'History of Canada,' and his remarks show that he spoke from experience. Shall I read them to you? I have the book right here."

"Please do," said Mrs. Woods. "I'll be glad to hear what some other sufferer thought about them."

"Here goes, then. Father Sagard, of course, wrote in French, but it isn't very hard to turn into English. He says that 'These little pests are not always present, however; they appear only in the hottest weather and when there is no wind, otherwise no one could endure their incessant vicious bitings, which make one's body look like a leper's, ugly and hideous to all who behold it.

"'I cannot express myself fully, since, for myself, I confess that it is the sincerest martyrdom I have suffered in this region; hunger and thirst, weariness and fever, are nothing in comparison. These little beasts not only make war upon you in the daytime, but even at night they get into your eyes, and into your mouth; they get through your clothes and pierce with their long stings even the clothing next your skin. Their buzzing is also extremely annoying, for it distracts your attention, keeps you from praying, from reading, from writing, from performing your tasks with any repose; they penetrate everywhere, especially into rooms where there is no breeze, which often obliges us to burn incense, the smoke of which quiets them for a time—but they always come back fiercer than before.'

"Doesn't that sound as if he were describing from actual experience?"

"Indeed it does," said Mr. Powell. "But we are going to start in a minute, and perhaps the breeze will strike us when we get out into the channel again."

"Of course, we'll make French River all right, but shall we reach Killarney tonight, Mr. Powell?" asked Major Woods, as the 'Tamarack' turned into an open channel and made speed enough to leave the mosquitoes behind.

"Hardly, I think. We'll be eating dinner while we are at French River, and will go as far as we can before dark. Then we'll tie up in the lee of an island until daybreak. I think we'll make Killarney before breakfast time, though."

NOTES AND QUESTIONS

Note that the Blue Mountains mentioned in this chapter are not those of the Alleghany Range.

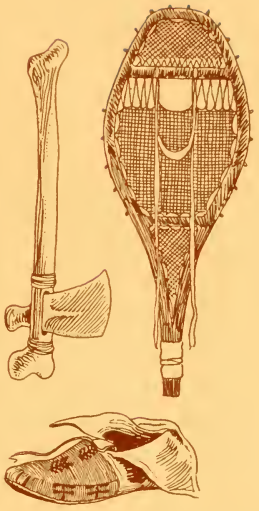
On a map of Northern France find Rouen (rōō′ ŏ) and Bayeux (by yuh′).

Find on the map Owen Sound, Collingwood, the Christian Islands, Penetang, Midland, Lake Simcoe, Byng Inlet, French River and Killarney.

Some of the proper names in this chapter are pronounced as follows:

Saugeen (saw gēēn′) O jĭb′ wāys Ragueneau (ră gĕn ō′)
Jean de Brebeuf (zhŏn′ dĕ brā bŭff′) Nicolet (nĭk ō lā′)
Sault Sainte Marie (sōō′ sānt mā′ ry) Sagard (săg ăr′)

Coureurs des bois is pronounced kōō rŭr′ dā bwă′; *voyageurs* is pronounced vwŏy ă jŭr′.



The next morning James and Carrie were awakened by Major Woods pounding on their doors and calling to them,

"Hurry up, if you want to see the 'Tamarack' come into Killarney."

When they reached the deck, Mrs. Woods and the two men were standing in front of the pilot house, and the yacht was just rounding the point.

"Good morning!" said Carrie, "I didn't know I had slept so late. Have you had your breakfast already?"

"Oh dear, no," answered the Major, as he pulled out his watch. "Do you see what time it is?"

"Only half past five!"

"Only half past five!" echoed James.

"Still," said Mr. Powell, laughing, "I suppose you could eat some breakfast now, couldn't you?"

"Yes, sir, I could. Some hot coffee would taste mighty good, for I'm really shivery."

"Well, here you are, then," he answered, as the steward came forward with a steaming urn. "We'll have a cup now, and the rest of our meal in a few min-

utes—unless you want to go ashore for breakfast. Eh, Major?"

"No, thank you," answered Major Woods. "We are perfectly satisfied with what we get on board. There's the Killarney House, though. I wonder if Angus Macdonald still runs it?"

KILLARNEY CHANNEL

"That's an odd combination," said Mr. Powell, "a Scotchman keeping a hotel with an Irish name."

"Yes, that's one reason why I remember it. But there are others. For one thing, when Mrs. Woods and my younger brother and I were up here a good many years ago, I met a Syrian who had been educated at Beirut, and I found he had studied under a man who was a college mate of mine down in Illinois. Meetings of that sort are not uncommon, I know, but it seemed strange to find a Syrian up in this out-of-the-way corner of the world.

"Another thing that I remember vividly is that, because Angus Macdonald had more guests than he could properly care for, we nearly starved. At last my brother Charles heard vaguely that there was a farmhouse back in the country a mile or so, where they took boarders and might give us a meal. So we set out on the chance, and after following a road through the swamp came to a neatly whitewashed one-story farmhouse under the trees some distance back from the road. When we asked if we might get dinner, they took us in cordially, and they gave us a meal that I remember yet, it was so good. Lucy, do you remember the name of those people?"

"It was French, wasn't it? Something that began with 'De la'?"

"Oh, yes, I have it now — Delamorandiere, though they pronounced it 'Delamorandery.'"

The steward came just then to summon them to breakfast, and before they were through, the 'Tamarack' was speeding westward.

"In a couple of hours," said Mr. Powell, "we'll be fairly into the North Channel, and then we'll see how fast the 'Tamarack' can go."

"Doubtless she is faster than the canoes of the *voyageurs,*" said Major Woods. "It seems odd, doesn't it, that this lonesome stretch of water was a chief highway three hundred years ago. But there's a chance, I think, that it may regain something of its old importance. The Canadians seem determined to have a ship canal by way of the French River, Lake Nipissing, and the Ottawa. If they do, this will be a busy place in the summer."

"Why only in the summertime, Uncle Jack?" asked Carrie.

"Have you forgotten that everything freezes up solid here from December to April?"

"How broad the North Channel is!" said James, when they had all gathered on deck again after breakfast. "On the map it doesn't look so broad, but now we are on it, it is miles across. But how deserted it is! Over on the Detroit River the boats were so thick it seemed like a procession, but here we haven't seen a boat of any kind since we left Killarney."

"There's a sail right now, Jim!" said Carrie, as they came opposite a deep bay in the northern shore.

"Probably a lumber schooner," said Mr. Powell, as he focussed his glasses on it. "Yes, if you look through these, Carrie, you can see the deckload."

"Oh, I see!" she answered, "and I can make out her name, too—'Charlevoix.'"

AN INDIAN LEGEND

An hour or so later, the 'Tamarack' met an excursion steamer bound for Collingwood. After it had passed, the children went to the stern and watched the gulls. At last they came back, and Carrie asked for an Indian story.

"Well, children," said Major Woods, "the Indians tell one story connected with Grand Manitoulin Island that probably is based on fact, but has had supernatural details added to it, either to supplement their incomplete knowledge of the facts, or to satisfy their craving for

the marvelous. It was told to me by an Indian who was once my guide on a trip into the wilderness north of where we are now. We had finished a hard portage and were camped in the edge of the forest on a tiny sand-bank at the edge of a narrow, noisy little river. There

Making a Portage

was no moon, and we half sat, half reclined with our feet to the fire, and were having a last smoke before we wrapped our blankets around us and fell asleep. My guide was a vigorous, active man, who did not look more than fifty, though he assured me he was nearly seventy. The story, he said, had been told him—as is the custom

among the Indians—by his grandfather, when the grandfather was very old and the guide still a boy. I can't tell it as he did, but the story runs something like this:

"Once a party of Ottawas, who had won a great victory over the Winnebagoes of Wisconsin, had just returned to their village on Grand Manitoulin Island, bringing with them numerous scalps and a few prisoners. It was in the dead of winter, and the whole village, feeling perfectly secure from attack, gave itself up to a grand celebration. Suddenly, as if they had dropped down from the skies, a war-party of Iroquois swooped down upon the village with wild yells and waving tomahawks. They killed or captured all but two young people, a brave and his sweetheart, who had drawn a little aside from the rest in order to carry on their courtship unobserved. These two managed to escape, and with their snowshoes reversed so as to hide their trail, made their way westward across Cockburn and Drummond Islands, and then over the frozen lake to Mackinac Island. There they settled in a secluded part of the island, and in the course of years there grew up around their campfire a family of ten boys.

"One winter, however, the whole family disappeared, simply vanished, and left no trace. Of course, it is probable that they fled farther west to escape some enemy, or were lost on the lake, or something of that sort. But the Indians, because they could find no sign of any of the family, concluded that they had been turned into spirits, and to this day (so my old guide told me, as the fire burned low, and the wind in the treetops and the river rippling

against the boulders in its bed made queer little noises) there are Indians who have seen the old couple and their ten lusty boys wandering mournfully about Mackinac Island in the dead of winter. When I pressed him for instances, he said he had never seen them himself, but he was sure he had heard them, and some of his friends declared they had caught glimpses of them through the trees."

"Why, that's a regular ghost story, isn't it?" said James.

"Yes, Indian folklore has its share. I suppose there always have been ghost stories told around the campfires in every corner of the earth, and it will be a great many generations before they cease to be told and believed."

GARDEN RIVER

About the middle of the afternoon they passed a beautiful stretch of country, which Mr. Powell told them was Garden River.

"Garden River! What an attractive name!" said Mrs. Woods. "And what a pretty scene!"

"Do you wonder that the Indians come here to act scenes from 'Hiawatha'?" asked Major Woods.

"Do they really, Uncle?" asked Carrie.

"They have been doing so for a number of years. How much of 'Hiawatha' have you read, Carrie?"

"Every word of it, Uncle Jack. But was Hiawatha a real person? I thought Longfellow made up most of the story."

"Oh, dear, no. Don't you remember, for instance, where he tells about how the women blessed the cornfields? Well, the Iroquois did that when the first white men saw them, and they may do it yet, for all I know. Longfellow actually invented very little of his poem; all he did was to arrange and turn into verse some of the Indian legends he had found."

Entrance to Wilson Channel

"But, Uncle, you haven't told us whether Hiawatha was a real person or not," said James.

"Probably he was, but he lived so long ago that his real history has been forgotten, and we have instead a mass of legends, many of which make him out a supernatural being. According to the story told by an old Iroquois sachem, Hiawatha was a historic person, who founded the confederation of the Five Nations not far from the time when Jacques Cartier first sailed up the

St. Lawrence—that is, in the first half of the sixteenth century. As this Indian told the tale, Hiawatha was the one who first named the tribes. For instance, he called the Senecas and the Mohawks the 'doorkeepers' of the 'Long House' of the Iroquois. He also gave to each clan its totem of bear, wolf, turtle, and so forth, and made laws for the confederation.

"Hiawatha is undoubtedly an Iroquois name, but the scene of the poem, according to Longfellow himself, 'is among the Ojibways on the southern shore of Lake Superior, in the region between the Pictured Rocks and the Grand Sable.' And both the character which Longfellow gives to Hiawatha, and the incidents he relates of him, fit the Ojibway hero rather than the Iroquois.

"Now, among the Ojibways, or Chippewas—for both names apply to the same tribe—the person who does the things Longfellow ascribes to Hiawatha is called Manabozo or Nanabozho, and he is represented as a being gifted with supernatural powers, somewhat inclined to be mischievous, but as a rule goodnatured and helpful."

"Have you ever seen the Indians give their play, Uncle Jack?" asked Carrie.

"Yes, one summer when I was stationed at Mackinac, I came up here especially to see it. Mr. L. O. Armstrong, who induced the Indians to give it, and who arranged the scenes for them, used to spend his summers on an island here, and asked me to come over. The play was very effective, with this wonderful background of lake and islands."

"Were all the characters in it?"

"Nearly all of them. The part of Hiawatha was played by a splendid big Indian, handsome and dignified, who not only looked the part, but acted it impressively. That summer the woman who played the part of Minnehaha was his wife, a really handsome young squaw. I remember, too, old Nokomis, a brown, wrinkled, but active woman of fifty, with keen black eyes, full of humor. Altogether, as I remember, there were about forty people in the play. The most effective scene was at the end, where Hiawatha, after greeting and entertaining the Black Robes and the other pale-faces, stepped into his canoe and paddled slowly off, singing as he disappeared around the end of the island:

'Mahnoo ne-nah nin-ga-ma-jah,
Mahnoo ne-nah nin-ga-ma-jah;
Hiawatha, ne, nin-ga-de-jah,
Mahnoo ne-nah nin-ga-ma-jah neen.
Hiawatha, neen, nin-ga-de-jah.'

"You remember how Longfellow tells it:

'And the evening sun descending
Set the clouds on fire with redness,
Burned the broad sky, like a prairie,
Left upon the level water
One long track and trail of splendor,
Down whose stream, as down a river,
Westward, westward Hiawatha
Sailed into the fiery sunset,
Sailed into the purple vapors,
Sailed into the dusk of evening.'"

"But, Uncle Jack," said Carrie, "what does that 'Mahnoo ne-nah,' that Hiawatha sang, mean?"

"I'm sure I don't know. The poet makes him say:

'I am going, O my people,
On a long and distant journey;
Many moons and many winters
Will have come, and will have vanished,
Ere I come again to see you.
But my guests I leave behind me;
Listen to their words of wisdom,
Listen to the truth they tell you,
For the Master of Life has sent them
From the land of light and morning!'"

"It must have been beautiful," said Carrie, and she quoted, half to herself,

"'Thus departed Hiawatha,
Hiawatha the Beloved,
In the glory of the sunset,
In the purple mists of evening,
To the regions of the home-wind,
Of the Northwest-Wind, Keewaydin,
To the Islands of the Blessed,
To the Kingdom of Ponemah,
To the Land of the Hereafter!'"

HOW THE OJIBWAYS CAME TO THE SOO

"Did Longfellow put all the Ojibway legends into 'Hiawatha,' Uncle Jack?" asked James, after a pause.

"Oh, no, only a few of them. I heard a number of others from a very old Indian who lived on an island in the Soo Rapids. He was so dried and bent and wrinkled that he looked old enough to have seen Hiawatha himself. The island he lived on was only a great jumble of huge sandstone rocks, and he told me that they had

been thrown there in one of the combats between Hiawatha and Paupukkeewis."

"Tell us some more of them, Uncle, please," said Carrie.

"Didn't I ever tell you how the Ojibways came to settle around the Soo here? No? Well, it seems, so this old man told me, that at first the Ojibways, like other good Indians, lived in heaven. But the Great Spirit once let a pair of them fly down to earth in the shape of crows. These two crows flew through the whole world, looking for the best place to settle. One place looked attractive to them because there were great herds of buffalo, so they killed a buffalo, and broiled some steaks and ate them. But the taste of the flesh told them that these animals would finally disappear, so they went on, and came to a place where there were many bears, cinnamon bears and grizzlies. They killed a bear, but when they tasted his meat, they found that the bears, like the buffalo, would some day all be killed, so they traveled on.

"Thus they went about, tasting the flesh of deer, and elk, and caribou, and moose, and beaver, and seal, but finding always from the taste of the flesh that these animals were all doomed to disappear. At last, after many wanderings they came to the Soo, and in the rapids they saw many fine fish, perch, and pickerel, and muskallonge, and trout, and whitefish. So they caught a whitefish, baked him in the coals, and ate him. It was a delicious meal, and besides, the taste told them that the supply of fish would never fail. Here, then, was the place for

them to live, so they alighted upon the ground, and as their feet touched the earth their forms suddenly changed and instead of being crows they became human beings. And that is how the Ojibways happened to settle along the straits here where three great lakes come together."

"Oh, that's fine, Uncle," said Carrie, "I think that's even better than the one you told us in the Mohawk Valley about the Wolf tribe that King Joseph Brant belonged to."

THE LOCKS AT THE SOO

From Garden River the steamer passed through Little Lake George and by a devious channel to Sault Ste. Marie.

"Uncle Jack," asked Carrie, "who was the first white man at the Soo? You told us, I think, but I've forgotten."

"Jean Nicolet, so far as we know, in the summer of 1634. In September, 1641, Fathers Jogues and Raymbault came out to the Soo and established a mission—the first one west of the Georgian Bay."

"Oh!" cried James, "see that Indian right out in the rapids! What is he doing? Is he trying to get up the river?"

Major Woods took a long look and answered:

"No, he is fishing. There used to be lots of them who did their fishing that way. They catch the fish as they come up against the current. But now most of the Indians make their living in the summer by taking white men down through the rapids. It is about the most exciting form of 'shooting the chutes.'"

Here our party left the "Tamarack," and after saying goodbye to Mr. Powell and Captain Adams, went to look around before taking one of the big steamers to Mackinac. As they started off, Major Woods said:

"While we are on the Canadian side we may as well take a look at the first lock built here. The Hudson Bay Company built it in 1798 to get their vessels through. You see," he continued, as they stood looking at it, "it wasn't very big, for it is only thirty-eight feet long, and less than ten feet wide—just about large enough to take a pair of the big canoes they used in those days.

"It looks very small alongside of this new lock here, doesn't it? This one, which was finished in 1895, almost a hundred years later, is 900 feet long and sixty feet wide. The bulk of the commerce on the river goes through the American locks, however, because thus far the south shore of Lake Superior has had the greatest development. The great copper mines, and the huge iron ranges are on the Michigan side of Lake Superior, and Duluth and Superior, at the head of the lake, have been ports through which the wheat crops of the American Northwest have found their way to market.

"Now let's take the ferry and see what we can see on the American side. The first locks over here were built by the state of Michigan. There were two of them, end to end, each one 350 by seventy feet. They were finished in 1855, but the traffic increased so rapidly, and the lake boats were made so much larger that in 1870 the United States government began this lock to the west, which is named the Weitzel lock, after the engineer who was in

charge of its construction. It took eleven years to finish it, and then in 1887, only six years later, the two old locks were torn out and the Poe lock built in their place. Now, they are talking of building still bigger ones in order to take bigger boats and handle them more rapidly.

"The Soo is like the Detroit River in the enormous tonnage that passes through it, for in the eight or nine months in which it is open more tons of cargo pass through it than go through the Suez Canal or into London or Liverpool in twelve months."

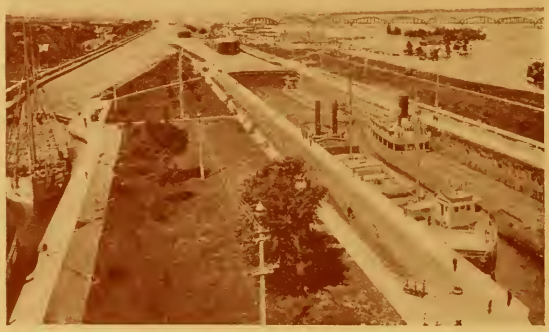
"Then, Uncle," said James, "why isn't there a big city here, as there is at Detroit?"

"Because, so far, commerce merely passes by here on its way from one point to another. It doesn't have to be transferred here, as it does at Buffalo, and the region close at hand has not yet developed either mineral deposits or farming, so that there is only a small population to use this as a distributing point. If the time ever comes when both shores of Lake Superior are as thickly settled as the south shore of Lake Erie is now, then Sault Sainte Marie will be a very important place. Another thing which ought in time to make this a business center is the water-power. The river drops about twenty feet in less than a mile, and on both sides of the river there are already canals and turbines. But thus far the chief use of this power has been in the pulp mills."

"Pulp mills," echoed Carrie, "what are they?"

"They are mills where they turn spruce logs into wood pulp, and then make the pulp into paper. They do this in two ways. One is by grinding up the logs, resin and

all. The other way, which is more expensive for it does not produce as much pulp from a cord of wood as the grinding does, makes a better quality of paper. This second method dissolves the resin by calcium sulphite, which is made from limestone, water, and sulphurous acid. The sulphur comes from Sudbury, where it is saved as a by-product from the smoke of the nickel



THE LOCKS AT THE SOO

smelters. Our newspapers are all printed on paper made from wood pulp.

"The spruce trees are cut up into four-foot logs, and these logs are made into a raft which is held together by a boom made of logs fastened end to end. Then a tug tows this raft to the mill. The tug can make only about two or three miles an hour, and because the raft is so big and unwieldy—it sometimes covers two or three acres

—the tugs are required to have a siren whistle so as to give passing vessels time to pick a safe course.

"Now let's watch these boats go through the Poe lock, and then we'll have something to eat before we start for Mackinac."

"Oh, what a funny boat!" said Carrie.

"Don't you know what that is, Carrie?" said James. "That's a whaleback."

"Why do they build them that way, Uncle?" asked Carrie.

"They used to think that if they rounded the deck that way, the waves could wash over the boat without damage. But they have gone out of fashion, and the cargo boats they build now are like the ones you saw at Ashtabula and Lorain.

"Well, well! I'm really getting hungry. Suppose we go back to the boat."

"How far up is Lake Superior, Uncle?" asked James.

"We'd have to go nearly twenty miles to get out into the open lake. We haven't time now, but perhaps next summer we'll come and make the tour of Superior and see the copper and iron mines which furnish so much of the tonnage that goes through the locks here."

NOTES AND QUESTIONS

Sudbury is in Ontario, almost north of Killarney.

Beirut (bā rōōt′) is in Syria, on the coast of the Mediterranean. Find it on a map.

Trace on a map the journey from Killarney to the Soo.

How far is it from Montreal to the mouth of the French River? From French River to the Soo?

How far is it from Montreal to Detroit by way of French River? by way of Lake Ontario and Lake Erie?

Some of the proper names in this chapter are pronounced as follows:

Wĭn nē bā′ goes	Cockburn (kō′ burn)
Hiawatha (hē ă wä′ thă)	Pau pŭk kēē′ wĭs
Jacques Cartier (zhăk′ kăr tē ā′)	Nō kō′ mĭs

Spell, pronounce, and explain:

(These words are from Chapter Four)

christianize	missionaries	relatively
estimate	exterminated	sentinel
slaughtered	pemmican	permanent
hostility	flourishing	especially
remnants	handiwork	visible
astrolabe	quadrant	sextant
intricate	positively	tapestry
fascinated	prism	magnet
victorious	agonies	gigantic

(These words are from Chapter Five)

satisfied	combination	supernatural
supplement	incomplete	marvelous
unobserved	reversed	secluded
glimpses	folklore	totem
mischievous	impressively	caribou

BLOCKHOUSE AT MACKINAC

While they were at the dinner table the boat's whistle sounded again and again to call in the belated tourists, and before they had finished they felt the throb of the screw as the vessel slipped away from the landing and started down the river. James and Carrie hurried through their dessert and ran up to the deck to watch. By the time Major and Mrs. Woods joined them it was quite dark, and they could see only the beacons and the red and green lights of passing vessels. From time to time the steamer's searchlight would throw a dazzling beam ahead, bringing out a double row of channel buoys, and then would abruptly disappear, leaving the darkness more intense than before.

"Why do they have to mark a straight channel so carefully, Uncle Jack?" asked James.

"Because we are on Hay Lake, which is sixteen or eighteen miles long and several miles wide. It is a shallow lake, and the government has dredged out a channel through the middle of it. If it weren't carefully marked, vessels might stray out of it just far enough to run aground, and if a big cargo boat stuck its nose into the

mud on one side of the channel, its stern might swing around enough to nearly block the passage. I have seen an accident of that sort in the height of the season tie up over a hundred vessels. To avoid such delays, the government has very strict rules about speed and courses, and a captain who is caught disobeying is heavily fined."

"How can they tell whether they are going too fast or not, Uncle?" asked Carrie.

"Didn't you notice that little launch that was puffing up and down among the vessels as we came up from Garden River? That was the boat of the officer in charge of the river. He watches the vessels, directs their movements, and prevents blockades."

While Major Woods was talking, a fog swept up and the steamer at once slowed down and began to whistle hoarsely at regular intervals.

"Well," said Major Woods, "we may as well go to bed. We shan't get to Mackinac until long after breakfast."

MICHILIMACKINAC

The next morning the boat had just passed Detour as our party went down to breakfast. Not long after they came on deck again, someone pointed out the island to them—a dark blur on the horizon away in front of them, which rapidly grew more distinct.

"Oh! how beautiful!" exclaimed Carrie, as the boat came near the island. "So this is Mackinac! And is this the fort that was captured by the Indians?"

"No," answered Major Woods, "the French felt too

isolated on the island. Father Marquette and Father Dablon were here for a year or so, but in 1671 Father Marquette founded the mission of St. Ignace de Michilimackinac over on the point of the northern peninsula, between Lake Huron and Lake Michigan. Then when La Salle and Tonty came along on the 'Griffon' in 1679, they built a stockade there. For some years after 1694 Cadillac was in command of Fort Michilimackinac and was governor of the whole region hereabouts. In 1705 the Jesuits withdrew to Quebec and burned their church at St. Ignace, but in 1715 the French again put a garrison there. Then in 1728 they built a new fort on the southern peninsula across the Straits, near where Mackinaw City now is. It was this fort at Mackinaw that the Indians captured in 1763.

"The fort on the island here wasn't begun until 1779 or 1780. In the summer of 1780, Major Patrick Sinclair of the British army moved his force over here, though the fort wasn't completed until 1783. This fort, however, has seen some fighting, for the British captured it during the War of 1812 and successfully resisted an attempt of the Americans to take it back again. It is a very picturesque fort, as you see, but if you will look closely, you will also see that the hill back of it is a good deal higher. The British understood that, and by landing on the back of the island and getting control of the hill, compelled the Americans to surrender. Then they fortified the hill, so as to keep the Americans from repeating the same exploit by which the British won the island.

"Well, here we are. We'll go to the Astor, which is

in part the old warehouse which the original John Jacob Astor had built for his fur traders. When we get settled, you children can run around and see the sights, and after dinner I'll tell you about the capture of the old fort over on the mainland."

THE FIRST ENGLISH TRADER AT MACKINAC

"What does 'Michilimackinac' mean, Uncle?" asked Carrie, after dinner.

"It means 'great turtle,' and if you have been up on top of the hill where you can see the whole island, you'll understand that it is an appropriate name, for it looks very much like a huge turtle floating on the lake."

"Why, so it does!" said Carrie.

"Uncle Jack," said James, "you promised to tell us how the Indians captured the fort."

"Fortunately," answered Major Woods, we have an account of it from an eye-witness, Alexander Henry, who was the first English trader to come to Mackinac. Incidentally, his account gives us some interesting details of how men traveled in those days.

"You remember that the French surrendered Canada to the English in 1760. Mr. Henry obtained his license on August 3d, 1761, and the next day started from Lachine by way of the Ottawa River. His canoes, he tells us, were thirty-three feet long and four and a half feet wide in the middle. They were made of birchbark a quarter of an inch thick, sewed with *wattap*, that is, spruce rootlets, and pitched with pine gum. They were propelled by paddles, though sails were sometimes used,

especially on the lake. Each boat carried a crew of eight men, a thousand pounds of provisions, and sixty packages of freight weighing from ninety to a hundred pounds each. The freight was done up in small parcels because of the numerous portages on the way. Each

Arch Rock, Mackinac Island

man was allowed forty pounds of baggage, so that the total burden in a canoe was four tons or more. There were usually a number of canoes in a party, and for every three or four canoes there was a *guide,* or squadron commander.

"At the island of La Cloche, in Lake Huron, the Indians told Henry that the Mackinac Indians would surely kill him because he was an Englishman and not a Frenchman. So Henry put on a suit of Canadian clothes, smeared his face with grease and dirt, and as soon as he reached Mackinac Island went on across the Straits to

the fort, leaving his assistant, a Canadian named Campion, to act as proprietor. His attempt at a disguise did not deceive the Indians, however, and friends at Mackinaw urged him to flee at once to Detroit. But Henry was a dogged man, and since he had risked everything on his venture, he refused to abandon his goods.

INDIAN ORATORY

"The very next day after his arrival, about sixty Chippewas from the island came to visit him. They reached Mackinaw about two o'clock in the afternoon, and Henry reports that 'They walked in single file, each with his tomahawk in one hand and scalping-knife in the other. Their bodies were naked from the waist upward, except in a few examples, where blankets were thrown loosely over their shoulders. Their faces were painted with charcoal, worked up with grease; their bodies with white clay, in patterns of various fancies. Some had feathers thrust through their noses [for which reason the French called them Nez Percés, that is, 'pierced noses'], and their heads decorated with the same.'

"After they had sat and smoked in silence for a long time, according to their custom, their chief arose and made the following speech, which I am going to read to you because it is a good example of Indian oratory:

"'Englishman, it is to you that I speak, and I demand your attention!

"'Englishman, you know that the French King is our father. He promised to be such; and we, in return, promised to be his children. This promise we have kept.

"'Englishman, it is you that have made war with this our father. You are his enemy; and how, then, could you have the boldness to venture among us, his children? You know that his enemies are ours.

"'Englishman, we are informed that our father, the King of France, is old and infirm; and that being fatigued with making war upon your nation, he is fallen asleep. During his sleep you have taken advantage of him, and possessed yourself of Canada. But his nap is almost at an end. I think I hear him already stirring and inquiring for his children, the Indians; and, when he does awake, what must become of you? He will destroy you utterly!

"'Englishman, although you have conquered the French, you have not yet conquered us! We are not your slaves. These lakes, these woods and mountains, were left to us by our ancestors. They are our inheritance, and we will part with them to none. Your nation supposes that we, like the white people, cannot live without bread—and pork—and beef! But you ought to know that He, the Great Spirit and Master of Life, has provided food for us, in these spacious lakes and on these woody mountains.'"

"My!" said James, "that Indian knew how to talk straight out, didn't he!"

"This speech," continued Major Woods, "shows us the feeling of the Indians toward both the English and the French, and it is important to note it, because it was by playing upon this feeling that Pontiac managed to induce so many tribes to enter his conspiracy. The

French traders, of course, did not want to see the English come in and take away their trade, and for a long time Pontiac believed that the French would help the Indians if they only made a good beginning.

Sugarloaf Rock, Mackinac Island

"Well, Henry answered the Chippewas diplomatically, and gave them some presents, including at their special request a small keg of rum —'the white man's milk.' He decided not to try to trade with them for the present, but spent a year or more in learning the Chippewa language. He also made friends with the Indians, with one chief in particular, a man named Wawatam.

"When Pontiac was bringing his conspiracy to a head in the spring of 1763, Major Etherington, who was in command of the little garrison at Michilimackinac, was definitely and positively informed of the plot to seize and destroy the garrison, but refused to believe it. Henry, who could read the signs better, was suspicious and uneasy. Just before the time for the attack, Henry's friend Wawatam came to him and urged him to join him in a long trip. Unfortunately, Wawatam was pledged not to betray the plot, so he could not give

Henry his real reason for wanting him to go, and Henry refused. As it turned out, it was fortunate for him that he did not go.

THE FATAL BALL GAME

"Henry reports that 'June 4th was the King's birthday. The morning was sultry. A Chippewa came to tell me that his nation was going to play at baggatiway—lacrosse—with the Sacs, for a high wager. He invited me to witness the sport, adding that the commandant was to be there, and would be on the side of the Chippewas. In consequence of this information, I went to the commandant, and expostulated with him a little, representing that the Indians might possibly have some sinister end in view; but the commandant only smiled at my suspicions.

" 'The game of baggatiway was the most exciting sport in which the red man could engage. . . . [Here Henry describes the game at length.] . . . This game, with its attendant noise and violence, was well calculated to divert the attention of officers and men, and thus permit the Indians to take possession of the fort. To make their success more certain, they prevailed upon as many as they could to come out of the fort, while at the same time their squaws, wrapped in blankets, beneath which they concealed the murderous weapons, were placed inside the enclosure. The plot was so ingeniously laid that no one suspected danger. The discipline of the garrison was relaxed, and the soldiers permitted to stroll about and view the sport, without weapons of defense. And

even when the ball, as if by chance, was lifted high in the air, to descend inside the pickets, and was followed by four hundred savages, all eager, all struggling, all shouting in the unrestrained pursuit of a rude athletic exercise, no alarm was felt until the shrill war-whoop told the startled garrison that the slaughter had actually begun.'

"It happened that Henry did not go to see the game, as he was busy writing letters to go off to Montreal the next day. When he heard the war-cry, he went to the window and saw what was going on. In an effort to escape he went to the house of a Canadian, Langlade, and begged for shelter, but Langlade asked, in French, 'What would you have me do?' Fortunately, an Indian slave woman beckoned to Henry, sent him to the garret, locked the door and carried off the key. From a little window in the garret, Henry watched the end of the massacre, and then heard the Indians enter the house and ask for Englishmen. While the key to the garret was being found, Henry crawled under a pile of birchbark buckets, used for sugar-making.

" 'The door was unlocked,' he tells us, 'and the Indians ascending the stairs, before I had completely crept into a small opening which presented itself at one end of the heap. An instant later four Indians entered the room, all armed with tomahawks, and all besmeared with blood on every part of their bodies. . . . The Indians walked in every direction around the garret, and one of them approached me so closely that at a particular mo-

ment, had he put forth his hand he must have touched me.'

"Although Henry escaped for the time, the Indians came back the next morning, said they had not found Henry's body among the slain, and therefore that he

Blockhouse at Mackinac

must be hidden. Langlade's wife, fearing for her children, insisted that Langlade give Henry up, for it was better that he should die than her children. One of the Indians,' Henry continues, 'Wenniway, whom I had previously known, and who was upward of six feet in height, had his entire face and body covered with charcoal and

grease, only that a white spot of two inches in diameter encircled either eye. This man, walking up to me, seized me with one hand by the collar of the coat, while in the other he held a large carving-knife, as if to plunge it into my breast; his eyes, meanwhile, were fixed steadfastly on mine. At length, after some seconds of the most anxious suspense, he dropped his arm, saying "I won't kill you!"

"Wenniway left Henry at Langlade's until he could take him away without danger from other drunken Indians. Within an hour, however, another one, who happened to be in debt to Henry, came for him. First the Indian made Henry take off his coat and shirt—in order, as Henry learned afterwards, that they might not be stained with blood when the Indian killed him. The Indian then led Henry away from the settlement, but Henry resisted, and managing to free himself, ran to the fort, pursued by the Indian with his knife. At the fort the Indian chased Henry around Wenniway several times, but when Henry finally reached Langlade's house again, gave up his pursuit.

"The next day, Henry's master, Wenniway, marched him to the beach, where three other prisoners and seven Indians embarked in a canoe for the Beaver Islands in the upper end of Lake Michigan. But a thick fog kept them to the Michigan shore, and at Fox Point—'a long point stretching westward into the lake, and which the Ottawas make a carrying place, to avoid going around it' —an Ottawa hailed them, and the canoe turned to the land. As soon as it was within reach a hundred men

rushed from the bushes and dragged the prisoners ashore.

"The new Indians explained that they were friendly Ottawas, and had rescued Henry and his fellows. Then the Ottawas took them back to Michilimackinac, and took possession of the fort. The next day in a general council the Chippewas protested, and on the second day, after several speeches, the Ottawas returned the prisoners to the Chippewas. Luckily for Henry, Wawatam soon appeared, and after much ceremony and giving of presents managed to have Henry surrendered to him. Then Wawatam took Henry off for a winter's hunt with him and his family, and after many adventures Henry escaped to Montreal."

NOTES AND QUESTIONS

How far is it by water direct from Detroit to Mackinac? How much farther has our party traveled?

The name Nez Percés (nā′ pŭr sā′) is now given to a more western tribe of Indians which used also to pierce the nose.

Spell, pronounce, and explain:

abruptly	blockades	horizon
isolated	exploit	proprietor
inheritance	diplomatically	commandant
calculated	discipline	unrestrained
particular	ceremony	adventure

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